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**INVESTIGATING THE IMPACT OF
STAKEHOLDER COLLABORATION ON
INDUSTRY-WIDE ENTERPRISE RISK
MANAGEMENT: A CASE STUDY OF THE
US AERIAL ADVENTURE INDUSTRY**

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PHD

April, 2018

INVESTIGATING THE IMPACT OF
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INDUSTRY-WIDE ENTERPRISE RISK
MANAGEMENT: A CASE STUDY OF THE
US AERIAL ADVENTURE INDUSTRY

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A thesis submitted in partial fulfilment
of the requirements for the degree of
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Metropolitan University

School of Tourism, Events & Hospitality
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Abstract

The aim of this study is to advance the knowledge and understanding of collaboration theory and risk management, and thereby develop a collaborative risk management framework to portray how stakeholder collaboration can lead to effective risk management in the aerial adventure industry. This study will outline the US aerial adventure industry's paradoxical relationship with risk, representing a key ingredient whilst also raising questions over the long-term sustainability of the activity, due to a staggering increase in accidents. As a result, the industry attempts to create an illusion of risk and mitigate actual risk where possible through risk management. This study will thus argue that industry-wide stakeholder collaboration on risk management is the most suitable solution to the risk management conundrum in the industry.

Whilst risk management and collaboration theory have been widely commented on in the literature, there is a gap in the knowledge in regards to combining the two for effective risk management. A gap exists in the knowledge on the results of a collaborative industry stakeholder approach to risk management, be it in the aerial adventure industry or elsewhere. This study seeks to improve risk management procedures within the industry through the introduction of industry-wide enterprise risk management (IERM), a modified version of enterprise risk management (ERM), a traditional financial risk management framework, with a strong focus on industry-wide stakeholder collaboration. Indeed, this study will argue IERM should be the cornerstone of the aerial adventure industry in combination with a proposed safety committee. A qualitative case study approach was employed to provide an in-depth understanding of how industry stakeholder collaboration may improve risk management. A combination of convenience, snowball and purposeful sampling techniques were employed. 20 interviews took place with key stakeholders from both the private, public and third sector participating, after which thematic analysis was used to analyse the data. The data will indicate a particularly dynamic industry aware of the need and keen to improve on stakeholder collaboration to improve its risk management procedures. However, a number of barriers are identified such as trust and a lack of infrastructure. Theoretical contributions come from the creation of the relational resource dependency framework as well as the Safety Committee Life Cycle model. This study will call for the creation of a safety committee at industry-level to facilitate stakeholder collaboration and thereby improve risk management procedures. For this to be effective, a need for the standard-writing organisations to merge was identified.

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Chapter 1

1.0 - Introduction

The purpose of this study is to investigate the impact of stakeholder collaboration on industry-wide enterprise risk management within the US aerial adventure industry, a relatively recent type of visitor attraction within adventure tourism, one of the many subsectors of the tourism system. As a result of the limited research currently being available on the aerial adventure industry, the literature on adventure tourism was researched extensively in this chapter as part of presenting the research problem. Further on in this study, this played a key role in attempting to classify the aerial adventure industry as an adventure tourism visitor attraction, which has yet to occur.

Having emerged relatively recently as a commercial activity, adventure tourism is receiving increased attention both at academic and industry levels and is today one of the fastest growing tourism subsectors (Giddy and Webb, 2016; UNWTO, 2014; Williams and Soutar, 2009). Adventure tourism is today recognised 'as a discipline in its own right' (Hudson, 2003: 14) and is currently valued at \$263bn globally (UNWTO, 2014). This represents an astonishing increase of 195% since 2010. ATTA (2011) further predicts that by 2050 approximately 50% of all travel will be adventure tourism. A further testament to the growing popularity of adventure tourism was provided by the UNWTO (2014), pointing out that a trend has emerged of established tourism operators adding adventure tourism activities to their product portfolios. Further, numerous countries in various stages of economic development are prioritising adventure tourism for market growth as it enables destinations to differentiate by creating unusual and new products and activities (UNWTO, 2014; Page et al., 2006).

As a term, adventure tourism involves all types of commercial outdoor tourism and recreation, though a classification is hard to come by (Buckley, 2011). This is perhaps in light of its recent emergence within tourism, yet it is argued that any tourist activity involving adventure, taking place in the natural environment and involving some level of risk should be classed as adventure tourism (Giddy & Webb, 2016; Buckley, 2011; Hall, 1992). Adventure tourists have a desire to experience risky, challenging and exciting types

of visitor attractions set in novel environments in an effort to explore the self (Giddy and Webb, 2016; Fletcher, 2010; Williams and Soutar, 2009). Nevertheless, the commercialisation of adventure tourism has meant many activities, traditionally requiring high-level skill sets, have today become much more accessible to the masses (Varley, 2006). This, in turn, has created and developed a number of themes within the literature, such as adventure tourism as a performance (Holyfield, 1999), the commodification of nature (Cloke and Perkins, 2002), the environmental and economic sustainability of adventure tourism visitor attractions (Swarbrooke et al., 2003) and adventure tourism's paradoxical relationship with risk (Fletcher, 2010; Cater, 2006). It is the management of this latter theme that will provide the setting for this study. Because, somewhat surprisingly, adventure tourism lacks a risk management framework, despite the great deal of attention the role of risk has received within the literature (Cheng, 2017).

1.1 – Background: Risk and Adventure Tourism

The aerial adventure industry has experienced an incredible growth in the US since becoming a commercial activity in 2008 and thus providing a new type of visitor attraction to the tourism system, an under-researched field of study (Leask, 2016). This growth evidently led to a staggering increase in accidents of 55.8% in the space of merely four years (Billock et al., 2015). It is worth pointing out this figure is derived from accidents on zip lines alone, therefore including aerial adventure parks as well as canopy tours. Bearing in mind the very limited research and numerical data existing on the aerial adventure industry, Billock et al.'s (2015) study at least provides an insight. Nevertheless, as a result of the increase in accidents the industry is understandably concerned about its sustainability, with studies and articles calling for more effective risk management (Billock et al., 2015; Annas, 2016). Callander and Page (2003), for example, stated the obvious: that actual danger is bad for business and can ruin a destination's image. Evidently, accidents are bad for business. Yet, this study will outline the aerial adventure industry's paradoxical relationship with risk, representing a key ingredient whilst also raising questions over the long term sustainability of the activity. As a result, the industry attempts to create an illusion of risk and mitigate actual risk where possible through risk management. Maintaining this balance between perceived risk and actual risk is therefore critical to the aerial adventure industry. Indeed, it is, among other characteristics, this relationship with risk that should categorise this activity as an adventure tourism activity, which has yet to occur and the reason why literature on adventure tourism was chosen as another option to

the limited literature on aerial adventures. Other shared characteristics include co-creation, the levels of responsibility placed on participants in regards to their personal safety and motivations for participating. Millington et al (2001: 67) outlined the motivations for undertaking adventure activities claiming that 'adventure travellers expect to experience various levels of risk, excitement and tranquillity and be personally tested'. Many experts agree that the main ingredient and attraction to adventure tourism is risk (Cater, 2006; Bentley et al., 2010; Buckley, 2012; Page et al., 2006; Miles and Priest, 1999; Holyfield and Fine, 1997). Ewert (1989: 8) for example argued that key to adventure tourism is 'the deliberate seeking of risk and the uncertainty of outcomes'. However, as Ryan (2003: 55) points out, 'the definitions of risk and uncertainty are themselves complex concepts'.

The Merriam-Webster Dictionary describes the word "risk" as 'the possibility that something bad or unpleasant (such as an injury or a loss) will happen'. However, in adventure tourism the meaning of risk, in a less narrow context, is something that 'is dared in order to gain advantage, something wherein the probability of loss is set aside in order to derive benefit' (Ryan, 2003: 56). Thus, risk in adventure tourism has a less negative association and is perhaps viewed positively because of the emotional rewards achieved from overcoming the risk. Holyfield et al. (2005: 174) argue that other important aspects of adventure tourism include 'spontaneity' and 'impulsivity'. Cater (2006) describes risk as an increasingly important aspect of life today, arguing that with declining risks in our everyday lives we are more likely to accept the presence of risk during leisure activities. The British Medical Association, for example, claimed that 'it is clear that people in general are prepared to accept far higher levels of risk in recreation than they would be at work' (BMA, 1990: 146). However, the common adventurer does of course not seek actual harm and thus adventure tourism seems to present a paradox as pointed out by Buckley (2012) and Fletcher (2010). Naturally, risk and safety contradict each other and thus operators must downplay the risks involved and emphasise safety to a certain extent. If risks are perceived to be too high, for example, only few will participate (Kane and Tucker, 2004; Fletcher, 2010). Nevertheless, it would seem that adventure tourism functions on this paradox.

Holyfield et al (2005: 174) points out that 'today's adventure companies now compete to provide excitement and other intense emotions while guaranteeing the safety of those who do not actually wish to risk their lives experiencing these sensations'. Indeed, some experts claim that risk is not needed as adventure can include other attractive qualities such as

insight, challenge and play (Cater, 2006; Kane and Tucker, 2004; Pomfret, 2006, Walle, 1997). On the other hand, experts argue that without risk there is no adventure (Weber, 2001; Kane, 2010). Kerr and Mackenzie (2012) seem to concur, arguing that adventure tourism and adventure recreation contain two elements of adventure: physical risk (physical), social (humiliation) and emotional risks. They further argue that physical risks are obvious in adventure tourism and must be managed (Mackenzie and Kerr, 2013). Holyfield et al (2005) also argue that risk is essential to adventure tourism as participants undertaking commercial adventure tourism activities are rewarded with a satisfying experience they call adventure. Fletcher (2010), however, posits that commercial adventure tourism often lacks real risk, hence the paradox. Cater (2006) is perhaps of the same opinion referring to his own study where bungee jump instructors would rather use the jump to get to the bottom of the cliffs instead of climbing down. One could argue that if the activity was extremely risky then the instructors would not casually use the jump as a mode of transport. Kerr and Mackenzie (2012) argue that adventure activity operators can incorporate the paradox by hiding one of the two main elements from participants. For example, operators may heighten the perception of risk, by lowering the actual risk, or minimising risk perceptions where actual risk is great, thus attempting to balance the two out. Nevertheless, maintaining the balance between actual risk and perceived risk would appear to be critical for the long-term sustainability of the industry.

1.2 – Risk and Collaboration: solving a never-ending conundrum

With the responsibility of participant safety having shifted from participants to operators as adventure tourism has commercialised (Cater, 2006) operators instead attempt to provide the illusion of risk without delivering genuine danger (Fletcher, 2010). Essentially, the operator attempts to remove the risks, but at the same time maintain excitement. As a result, risk management is an important aspect for operators to grasp. Cater (2006) argued that participants do not wish to face actual danger, but it is the thrill and excitement of the potential of danger that they enjoy, creating a conundrum as the aerial adventure industry attempts to balance perceived risk and actual risk. Thus, Holyfield (1999: 5) points out that the aim of adventure tourism operators is 'to provide a desirable (and profitable) mixture of perceived risk and organisational constraint for novice consumers because not everyone demands truly fateful action'. However, whilst risk management standards have been issued by organisations such as the ACCT, ASTM and PRCA for many years now, these standards are voluntary in many cases and one could argue that collaboration between

public and private stakeholders within the aerial adventure industry would make risk management much more effective.

Due to the fragmented nature of the aerial adventure industry, this study will argue for considerable levels of collaboration and coordination between the various stakeholders, such as operators, the state, builders and suppliers, as put forth by Bramwell (2011). Czernek (2013) argued industry-wide stakeholder collaboration leads to the development of competitive advantage, prevents and solves stakeholder conflicts, combines resources and prevents resource deficiencies of the individual organisation. In the case of this study, the resource deficiency in question is that of knowledge. Indeed, it has been argued the most meaningful resource today is knowledge (Tzortzaki and Mihiotis, 2012), which in turn drives development, innovation and commercialisation (Ruhanen and Cooper, 2004). In its pursuit of balancing actual risk with perceived risk, these aspects are all key to the long-term sustainability of the aerial adventure industry, as will be argued throughout this study. Mandell (1999) also argued that when faced with a number of complex issues, it is not feasible for organisations or society to solve such issues single-handedly, but must do so collectively through industry-wide collaboration. Through collaboration stakeholders are able to address complex matters through a dynamic and flexible process capable of change over time (Jamal and Stronza, 2009). The ability to change benefits the aerial adventure industry, given the dynamic nature of the industry, particularly in regards to risk management and innovation. Further, the literature review will argue that industry-wide risk management procedures developed and implemented through stakeholder collaboration are more likely to receive industry-wide approval.

Whilst risk management and collaboration theory have been widely commented on in the literature, there is a gap in the knowledge in regards to combining the two for effective risk management. This study will discuss risk management and collaboration individually in terms of their nature and respective purposes, in chapters two and three respectively. Yet, a gap still exists in the knowledge on the results of a collaborative stakeholder approach to risk management, be it in the aerial adventure industry or elsewhere. This study seeks to improve risk management procedures within the aerial adventure industry through the introduction of industry-wide enterprise risk management (IERM), a modified version of enterprise risk management (ERM), a traditional financial risk management framework, with a strong focus on industry-wide stakeholder collaboration. Indeed, this study will

argue IERM should be the cornerstone of the aerial adventure industry in combination with a proposed safety committee. However, despite the clear focus on the visitor attractions of adventure tourism, safety and risk management has received limited attention within the past decade (Cheng, 2017). Indeed, somewhat alarmingly, risk management frameworks have yet to be formed within the adventure tourism literature, despite the need for it seemingly obvious (Cheng, 2017; Bentley et al., 2010). As such, this study provides a theoretical contribution to the adventure tourism and visitor attraction literature in the form of the IERM framework. This study also furthers research on visitor attractions, an under-researched field of study within tourism (Leask, 2016). Further theoretical contributions come from the creation of the relational resource dependency framework as well as the Safety Committee Life Cycle model.

1.3 – Research questions and research approach

With the research problem in mind, the aim of this study is to advance the knowledge and understanding of stakeholder collaboration theory and risk management, and thereby contributing to knowledge through the development of a collaborative risk management framework.

PhD objectives:

1. Investigate and ascertain the main challenges of risk management within the aerial adventure industry including maintaining the balance between perceived and actual risks, perception issues, demand and leadership.
2. Explore and establish the value of public, private and third sector stakeholders collaborating to achieve effective risk management focussing on trust issues, leadership, motivations benefits and barriers.
3. Establish the suitability of IERM in the aerial adventure industry by exploring current risk management practices as well as desires to improve on such within the industry.
4. Explore and establish the requirements and barriers for industry-wide collaboration within the aerial adventure industry, with a particular focus of the thoughts of management representing private as well as public stakeholders.

5. To propose a framework to enhance the management of risk on an industry-wide basis using a collaborative approach with a focus on knowledge transfers between industry stakeholders and a safety committee.

PhD Research Questions

The research questions were identified after an initial review of the literature and prior to the data gathering. For example, question one sets out to understand the impact of perceived risk, identified in the adventure tourism literature, on risk management procedures in general and later on in the aerial adventure industry. Further, the research questions sought to investigate the relationship and requirement of stakeholder collaboration and knowledge transfers with risk management. This is evidenced in question five, for example. Additionally, the questions seek to compare the literature with the forthcoming findings.

1. What role does risk and perceived risk play in achieving effective risk management?
2. How can ERM achieve effective risk management in the aerial adventure industry?
3. Is industry-wide stakeholder collaboration important in the effective management of risk?
4. How can stakeholders within the aerial adventure industry collaborate to develop effective risk management procedures?
5. What role do knowledge transfers play in connecting stakeholder collaboration and IERM?
6. What role does leadership play in initiating and motivating industry-wide stakeholder collaboration?
7. What are the requirements for achieving industry-wide stakeholder collaboration within the aerial adventure industry?

1.4 - Contributions to knowledge

Bearing in mind the research problem, aim and objectives, this study will create a number of contributions to knowledge, theoretically as well as in regards to industry. The key contributions to knowledge of this study are derived from:

- The implementation of ERM in the aerial adventure industry, leading to the creation of IERM, a theoretical and industry contribution, shifting the traditional individualistic focus to the collective industry as a whole. In the literature, ERM has

yet to be introduced to the aerial adventure industry, or tourism studies in general for that matter. So far, the ERM literature has primarily focussed on the single organisation, rather than an industry, thus providing another key contribution to knowledge. The adventure tourism literature lack risk management frameworks, which is provided by this study through IERM. Chapter 2, 5 and 6 focus on these contributions.

- The creation of the Safety Committee Life Cycle adds another theoretical contribution to knowledge. Heavily inspired by the works of Selin and Chavez (1995) and Caffyn's (2000) tourism partnership models, this model posit the never-ending need for industry-wide stakeholder collaboration and a safety committee in the aerial adventure industry, in light of the never-ending cycles of risk management and innovation faced by the industry.
- Improving industry risk management procedures through stakeholder collaboration. At this stage, the literature has yet to focus on the importance of stakeholder collaboration in improving risk management procedures and, once again, a clear gap in the knowledge exists over the benefits of stakeholder collaboration to improve risk management procedures industry-wide. Chapters 3, 5 and 6 focus on these contributions.
- Chapters 3, 5 and 6 were also guided by two sub-theories, namely resource dependency theory and social exchange theory to understand, from a theoretical point of view, why stakeholders may seek to collaborate. Indeed, RDT and SET were briefly explored in chapter 3 and found a lack of resources and mutual dependency to be critical motivations, which was later found to be the case in the data as well. Bearing this in mind, chapter 6 argued for the combination of RDT and SET to propose the relational resource dependency framework. The relational resource dependency framework provides this study with another theoretical contribution to knowledge.
- The key industry contribution to knowledge can be found in the creation of the CIRM Group and Safer Adventure, a proposed safety committee for the aerial adventure industry with a sole purpose of improving risk management procedures for the industry as a whole through stakeholder collaboration. Knowledge is transferred from the group through Safer Adventure. Chapters 3, 5, and 6 focus on these contributions.

- The creation of the CIRM Group also added another theoretical contribution through the development of a Collaborative Industry-wide Risk Management framework, depicting the combination of industry-stakeholder collaboration and industry-wide risk management. Chapters 2, 3, 5, 6 focus on these contributions and chapter 7 sums them up.

The following chapters address the aim, objectives and research questions leading to the development of a collaborative risk management framework. To begin with, chapter two explored the background of aerial adventure, relating it to adventure tourism, the closest related academic discipline, with limited academic research existing on the aerial adventure industry. However, the majority of chapter two focussed on risk management, but in particular enterprise risk management and its potential suitability for the aerial adventure industry. Chapter three of this study further explored the literature on stakeholder collaboration and knowledge management to ascertain their role in introducing industry-wide risk management procedures in the aerial adventure industry. Chapters four, five and six in turn focussed on the research strategy behind the study, data gathering and analysis, followed by conclusion and recommendations in chapter seven.

Chapter 2

2.0 – Risk and adventure

2.1 - Introduction

Limited research into the aerial adventure industry exists at this point. As a result, adventure tourism in general was researched instead as many of the activities that fall under this category are extremely similar to that of aerial adventure parks. Whilst it has yet to occur, the researcher expects aerial adventures to be classed as an adventure tourism activity due to the many shared characteristics, such as the paradoxical relationship with risk (Fletcher, 2010), the levels of co-creation (Prebensen and Xie, 2017) and the motivations for participating (Buckley, 2012). Adventure tourism activities similar to aerial adventure parks include climbing and canopy tours (McKay, 2013), activities from each end of the scales in regards to the level of skills required from participants, yet which share a number of similarities, such as the use of zip lines. However, it is important to stress that, despite numerous similarities, aerial adventure parks and canopy tours are different adventure tourism activities.

A brief look into what aerial adventures entails, the history of the industry, the health of the industry and why so many people are attracted to it was researched. The subject of commercialisation of adventure tourism was also researched, as a result of aerial adventure parks being a part of that segment in adventure tourism. This chapter will, for example, highlight the paradoxical relationship that exists between the commercialisation of the activity and the required elements of risk within adventure tourism. This development has led to the creation of a perception of risk phenomena. In order for the stakeholders within the industry to ensure that the risks associated with the activities remain as much an illusion as possible, there is a need for strong risk management procedures to be in place.

As a result, this chapter will also explore risk management in general, but in particular enterprise risk management as a specific tool for the industry to manage its risks. Indeed, this chapter will argue that enterprise risk management is one of the key tools to provide effective risk management for the aerial adventure industry. Originally developed for

financial and insurance organisations, it has become a popular tool to manage operational risks within organisations as well, though it has yet to be deployed at an industry-wide level or academically in adventure tourism. Indeed, this risk management framework has yet to be used in a tourism context academically. To begin with, however, this chapter offers a brief insight to the tourism system in general and through this places the aerial adventure industry into the context of tourism and, more specifically, adventure tourism. This is then followed by a greater discussion of the aerial adventure industry and adventure tourism.

2.2 – The tourism system & industry

Leiper (1979) developed a framework to better understand the concept of tourism called the tourism system. Back then, and today, such an approach was critical to understand the tourism, due to its complex and dynamic nature (Cooper and Hall, 2016). Hall (2008) described a system as a collection of elements, which together form a unitary whole. As such, the tourism system is essentially made up of production, consumption and the experiences created within it. Leiper's (1979) tourism system consists of three elements: the generating region, the transit zone and the destination. These are further split into six sectors within the tourism sector, each linked and specialising in a certain function (Cooper & Hall, 2016):

- Tourism Marketing
- Tourist carriers
- Tourist accommodation
- Visitor attractions
- Miscellaneous tourism services (e.g. taxis)
- Tourism regulation

Visitor attractions are particularly considered key pull-factors of a tourism destination and catalysts for further development around them (Ram et al., 2016). The make-up of the tourism industry is undeniably complex, due to its relations with a vast amount of different sectors all required to deliver the tourism product. This is particularly evident when studying tourism destinations specifically, which typically consists of stakeholders from various industry sectors. Indeed, tourism touches most sectors in one way or another, contributing 7% of global exports, 10% of global GDP and providing one in ten jobs (UNWTO, 2017). Further, the contribution to global GDP is predicted to increase by 2027

and it is considered one of the fastest growing industries (WTTC, 2017; Kastarlak and Barber, 2012). Figure 1, below, depicts how the tourism industry engages with the various sectors. These sectors include accommodation and food, transport, events, entertainment, travel trade sectors, tourism services and, finally, adventure/outdoor recreation (Goeldner et al., 2009), the latter being the focus of this study. As such, tourism experiences contain functional, objective and tangible components, such as travelling, eating, drinking and recreating, whilst also containing subjective, hedonic, emotional and symbolic components, such as enjoying experiences and socialising (Williams and Soutar, 2009). Undoubtedly, it is challenging to list all sectors affected by tourism. Leiper (1979: 400), for example, commented that the tourism system comprises ‘all those firms, organisations and facilities which are intended to serve the specific needs and wants of tourists’. Essentially, tourism

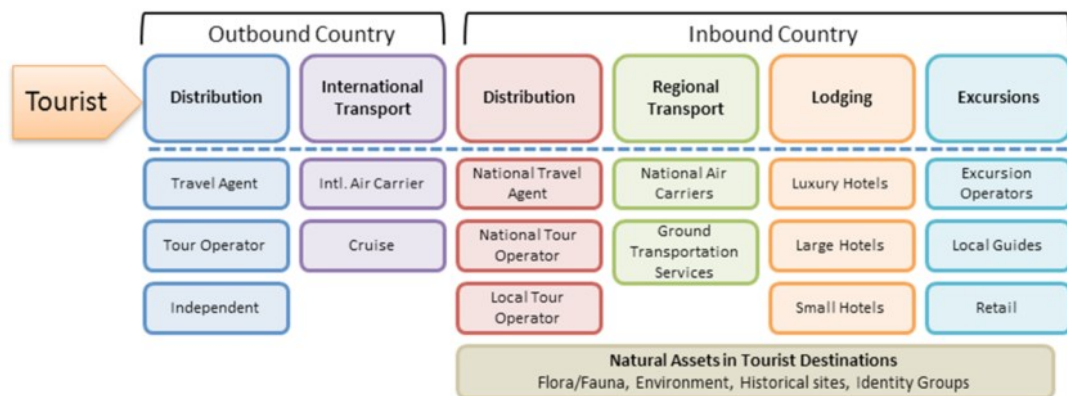


Figure 1 - Global Tourism Value Chain (Christian et al., 2011)

development creates a domino effect, with further economic development expected through employment creation, foreign exchange, infrastructure, government income and reduction in poverty. Indeed, tourism is considered a critical tool in generating economic growth (Henderson et al., 2018). Interestingly, tourism also appears rather resilient to external factors, having quickly recovered from the recent financial crisis of 2008 (Dogru and Bulut, 2018). As such, it is not surprising that developing countries are turning to tourism to develop their national economies (Sokhanvar et al., 2018).

In light of the overarching nature of the tourism system, it is perhaps not surprising that defining tourism has proven complex, with some arguing that tourism is not a stand-alone product, yet instead constitutes numerous products aiming to fulfil the tourist experience (Debbage and Ioannides, 1998; Judd, 2006). This is further highlighted in a number of areas such as the level of diversification within the industry, containing SMEs as well as major

corporations listed on the NYSE, such as Disney. Tourism also consists of tangible and intangible elements, such as the physical structures at a destination and the emotions experienced by the tourist (Cooper and Hall, 2016). Others argue that industries, in general, are in fact obsolete (Munir, 2015). However, traditionally, industries have been defined based on the manufacturing paradigm: they are all producing the same products (Cooper and Hall, 2016). In that case, defining tourism seems rather simple, as those that provide or manufacture products to fulfil tourism demand would seemingly belong within the tourism industry (Smith, 1988). This is also the stance of this study. A contemporary argument, along the lines of Munir (2015) could however be that individual organisations may no longer belong to single industries, but instead numerous. A hotel, for example, caters to numerous industries, including tourism.

2.2.1 – The Adventure Tourism & Aerial Adventure Industries

The tourism sector of which this study focusses on is adventure tourism and, more specifically, the visitor attraction-type of aerial adventure parks. Like other nature-based forms of tourism, adventure tourism is one of the fastest growing subsectors of tourism, with annual growth estimated at around fifteen percent (Cheng et al., 2016; Giddy and Webb, 2016; UNWTO, 2014; Williams and Soutar, 2009). Some have reported growth figures of 65% between 2009 and 2012 (Cheng, 2017). Countries of all stages of economic development are prioritising visitor attractions of an adventure tourism nature, due to their ecological, cultural and economic value (UNWTO, 2014). Adventure tourists, for example, on average spend \$3000 per person (UNWTO, 2014). These consumers tend to be young, educated, and affluent looking for thrills and excitement (Williams and Soutar, 2009). Adventure tourism has undergone considerable changes, most notably the commercialisation and mass accessibility of its activities (Rickly and Vidon, 2017; Giddy and Webb, 2016; Cloke and Perkins, 2002). As such, adventure tourism visitor attractions have gone from being a small and specialised activities to catering to the masses and thus resulting in a growing interest on the commodification of the industry (Giddy and Webb, 2016; Taylor et al., 2013; Cloke and Perkins, 2002). As the visitor attractions have commercialised, interest from an academic point-of-view has also increased (Cheng et al., 2016). Much of the literature has focussed on flow theory (Pomfret and Bramwell, 2016; Csikszentmihalyi, 1974), edgework (Lyng, 1990 and 2005), rush and its complex relationship

with risk (Buckley, 2012; Fletcher, 2010; Cater, 2006). It is the latter point which this study will primarily focus upon: its relationship with risk and how to deal with it effectively.

Similarly to adventure tourism, the aerial adventure industry has experienced considerable growth levels over the past decade, with some reporting as high as fifty percent annual growth in the US and Canada (Smith, 2017). This new type of visitor attraction first appeared in the US in 2008 and, as of 2015, the industry boasts 252 aerial adventure parks in the US (Smith, 2015). Indeed, as an activity it is receiving increased attention from existing and established visitor attractions, including within adventure tourism and other sub-sectors of tourism in general. These include ski resorts, family entertainment centres and amusement parks (Cummings 2018). Seasonality is an issue for most visitor attractions and destinations (Connell et al., 2015) and by combining aerial adventure parks with other visitor attractions the issue of seasonality is somewhat solved, particularly in the case of ski resorts. Suddenly, ski resorts in the US are open almost year-round and not solely dependent on a snow-filled winter. Naturally, as the industry grows, major brands are established as well, such as Ropes Courses Inc., Zoom Air, Treetop Trekking, WildPlay, Outdoor Adventures and Go Ape. Yet, as the industry continues to grow, the days of standalone parks seems numbered, with aerial adventure parks adding new, different yet complimentary attractions to their parks, such as climbing walls, jump towers and jump pads (Cummings, 2018).

Adventure tourism and aerial adventure parks come from a background of outdoor sports and recreation (Cheng, 2017; Wagstaff, 2015; Hall, 1992). Adventure tourism consists of a varied range of land-, air- and water-based activities, such as surfing, bungee jumping, climbing or cruising (Promfret, 2016). Indeed, adventure tourism has many things in common with other types of tourism, such as eco-tourism, volunteer tourism and activity tourism (Swarbrooke et al., 2003). Adventure tourism is recognised as being a particularly subjective experience, meaning what constitutes adventure to one tourist may not be considered adventure to another (Weber, 2001). Further, participating in adventure tourism activities generally involve risk, uncertain outcomes, challenge, insight, excitement, stimulation, discovery, novelty, contrasting emotions, separation and escapism, focus and absorption, responsibility, commitment, anticipated rewards and play (Pomfret, 2016). However, with commercial adventure tourism, the extent to which participants experience

these different elements is questionable. In many cases, these elements, such as risk and uncertain outcomes, are described merely as illusions rather than being real (Cater, 2006).

The Merriam-Webster dictionary (2017) describes adventure as 'an undertaking usually involving danger and unknown risks'. Certainly, Giddy and Webb (2016) described adventure tourism as activities involving risks, thus arguably supporting this argument. In addition, whilst risk traditionally has negative connotations, in adventure tourism, the connotation is largely positive (Cater, 2006; Ryan, 2003). It is worth noting, though, this is a managed risk in commercial adventure tourism, hence the notion of illusion of risk (Mackenzie and Kerr, 2013; Holyfield, 1999). Risk is widely believed to be one of the key attractions to adventure tourism, as well as aerial adventure parks (UNWTO, 2014; Buckley, 2012; Bentley et al. 2010; Cater, 2006; Page et al. 2006; Holyfield and Fine, 1997; Miles and Priest, 1999). Indeed, Swarbrooke et al. (2003) classed adventure tourism activities as either 'soft' or 'hard' depending on the level of inherent risk. They, for example, ranked climbing Mount Everest as a 'hard' adventure activity.

Due to the infancy of the industry, aerial adventure parks have yet to be classed specifically. Indeed, neither the UNWTO (2014) nor the ATTA (2013) have yet to list it as an adventure tourism activity. Leask (2010) classed the activity as an outdoor visitor attraction, which would seem particularly applicable. Nevertheless, as an activity, due to its shared similarities, the author of this study is of the belief that it should also be classed as an adventure tourism visitor attraction. For example, canopy tours are included under soft adventure (McKay, 2013) and thus it could be suggested that given the similarities between the two activities this is also where aerial adventure parks should be included. However, one of the greatest differentiators between aerial adventure parks and canopy tours, is the level of responsibility placed on participants. Canopy tours typically have guides following participants around the tour, which is not generally the case on aerial adventure parks (Smith, 2017). Nevertheless, aerial adventures share many of the aforementioned elements of commercial adventure tourism, such as risk, challenge and uncertain outcomes, though, once again, these are largely illusions, with some elements of reality. Going forward, the author will class aerial adventures as an adventure tourism activity and as such, any mention of adventure tourism includes aerial adventures as well.

Millington et al. (2001: 67) outlined the motivations for undertaking adventure activities claiming that 'adventure travellers expect to experience various levels of risk, excitement and tranquillity and be personally tested'. Cater (2006) argued that with declining risks in our everyday lives, people are more likely to accept the presence of risk during leisure activities, indeed seeking it outright. As such, it becomes clear the notion of risk plays a critical role in adventure tourism. However, this comes with a caveat: participants desire the feeling of taking risks, but do not seek actual harm as highlighted in previous ethnographic research (Buckley, 2012; Fletcher, 2010). Naturally, risk and safety contradict each other and thus operators must downplay the risks involved and emphasise safety to a certain extent. However, adventure tourism, seemingly thrives on this paradox. Yet, despite the clear focus on the attractions of adventure tourism, safety and risk management has received limited attention within the past decade (Cheng, 2017). Indeed, somewhat alarmingly, risk management frameworks have yet to be formed within the adventure tourism literature, despite the need for it seemingly obvious (Cheng, 2017; Bentley et al., 2010).

Holyfield et al (2005: 174) points out that 'today's adventure companies now compete to provide excitement and other intense emotions while guaranteeing the safety of those who do not actually wish to risk their lives experiencing these sensations'. Indeed, some experts claim that risk is not needed as adventure can include other attractive qualities such as insight, challenge and play (Cater, 2006; Pomfret, 2006; Kane and Tucker, 2004; Walle, 1997). On the other hand, experts argue that without risk there is no adventure (Kane, 2010; Weber, 2001). Kerr and Mackenzie (2012) seem to concur, arguing that adventure tourism is comprised of two components of adventure: physical risk (physical), social (humiliation) and emotional risks. These risks seem critical as they eventually provide participants with positive emotions and thus a satisfying experience (Holyfield et al. 2005). Some academics argue that commercial adventure tourism lacks real risk, however, with the actual risk having been managed out of the experience and replaced with a perceived, or illusion of, risk (Cater, 2006; Fletcher, 2010). Nevertheless, some risks are inherent and are instead managed to a certain extent, causing a balancing act between delivering perceived risk and actual risk (Kerr and Mackenzie, 2012). Maintaining the balance between actual risk and perceived risk would appear to be critical for the long-term sustainability of adventure tourism, as highlighted by Williams and Soutar (2005). With the responsibility of participant safety having largely shifted from participants to operators as

adventure tourism has commercialised (Cater, 2006) operators instead attempt to provide the illusion of risk without delivering genuine danger (Fletcher, 2010). Essentially, the operator attempts to remove the risks, but at the same time maintain excitement.

2.3 - The history of aerial adventure parks

An aerial adventure course is perhaps best described as a military training obstacle course set between 10 and 60ft in the air and is also known as a ropes course (Treego, 2014). An aerial adventure park consists of elements including, but not limited to, rope bridges, tight ropes, ladders, cargo nets and zip lines (Jiminy Peak, 2013). It is not clear when the first ropes course was built (EBL Ropes, 2014) however, Wagstaff (2015) argues that Hebert and Hahn pioneered the integration of the military ropes course into an educational context. It is widely believed these courses originate from the Alps of France (High Ropes Adventure, 2014, Berkshire Eagle, 2013). Hahn began the Outward Bound schools during the 1930s and 1940s in the UK, which later moved to the US (Wagstaff, 2015). In the US the concept also began as an educational experience, rather than recreational/leisure, and gained popularity primarily through the Outward Bound USA program during the 1960s (EBL Ropes, 2014). The courses with educational purposes experienced particular growth during the 1980s and a formal meeting among industry professionals in 1988 led to the formation of the Association of Challenge Course Technology (ACCT), the industry's first professional association, in 1993 (Wagstaff, 2015). The association further published the first industry standards in 1994 and now has two-thousand and six hundred members (ACCT, 2016). Later on, the Professional Ropes Course Association (PRCA) was founded in 2003, with similar goals to that of ACCT.

The first commercial aerial adventure park originated from France, having opened in 1995 (Wagstaff, 2015). However, not until 2008 did the first aerial adventure park open up to the general public in the US. Despite the industry's infancy, however, several courses are opening up every year in the US and Go Ape, the largest aerial adventure course company in the UK (Go Ape, 2014), has seventeen sites in the US with more in the pipeline (The Times, 2013; Go Ape, 2016). Aerial adventure courses are among the fastest growing segments of the commercial recreational industry (ASTM, 2013). As with tourism in general (Czernek, 2013) most organisations within this industry are SMEs. As an activity it has become considerably popular among both non-profit and for-profit organisations, with an

emphasis on providing educational, therapeutic and leisure experiences (Wagstaff, 2015). In the US, as well as many other parts of the world, the ropes course industry has become a success story providing team building events, canopy tours, aerial adventure parks and massive zip line parks (Wagstaff, 2015). In Europe alone, for example, the European Ropes Course Association (2010) estimates that over four thousand courses exist having served approximately twenty-five million participants and with an industry valuation of \$654,000,000. This apparent success has however, put pressure on governing agencies to regulate the industry (Wagstaff, 2015).

Canopy tours are similar to aerial adventure parks in many respects, the former consisting purely of zip lines instead of a mix of obstacles as well as zip lines as is the case with the latter (North Tahoe Adventures, 2016). The premise is the same, however, both representing different strands of a ropes course. Indeed, aerial adventures and canopy tours are very similar. However, it is worth pointing out, they are different, stand-alone activities from each other, though zip lines are critical elements to aerial adventure parks, they comprise one of several challenges available. Canopy tours originate from the jungle canopy, having been used to transport scientists from tree-to-tree in the early 1970s (Wagstaff, 2015). However, in 1992 Hreniuk opened the first commercial canopy tour in Costa Rica. Aerial adventure parks differ from the traditional ropes course experience in the sense that they are commercial operations with less focus on education and personal development and more on financial gain for the operator. In other words, a course operated for educational purposes is likely to provide a structured experience in order to facilitate the educational experience, whereas aerial adventure parks generally offer some training to the participants prior to starting the experience, often referred to as 'ground school', after which it is up to the participant, in many respects, to attempt the obstacles on the course independently (Wagstaff, 2015). As such, a certain level of responsibility is also placed on the participants themselves, in regards to their own safety. Nevertheless, aerial adventure parks are off-shoots of the traditional ropes course. Indeed, some operators have successfully turned their old-style ropes courses into aerial adventure parks today. However, particularly in the US, some industry professionals are concerned over the commodification of the industry, which in turn has complicated the development of industry safety standards due to the differences between the different types of courses (Wagstaff, 2015). It is perhaps therefore not surprising that the ACCT only recently has

begun requesting input from the industry as they develop their Aerial Adventure Park Standards (Adventure Park Insider, 2016).

Given the nature of the industry, it is considered a high-risk activity, similar to skiing for example, another adventure tourism activity. Particularly, the zip line sections of the parks have been acknowledged for their inherent risk of injury by numerous states (Billock et al., 2015). However, despite the high-risk nature of the visitor attraction some states have yet to regulate the activity, this is despite people sustaining serious injuries and even dying in some cases (Daily Mail, 2013). Indeed, whilst many states have introduced some regulations using safety standards developed by ASTM, ACCT or PRCA, the industry remains heavily self-regulated (Billock et al., 2015). In other words, currently in some states anyone can build a ropes course and start accepting customers. Whether that person has any previous experience, enough capital or followed certain standards would seem irrelevant. As such, the standards are largely followed on a voluntary basis by operators and builders. This is a recognised issue within the industry. Mike Barker, vice president of PRCA, for example, argued that a majority of the safety issues are due to amateurs building aerial adventure parks and he thus further calls for independent inspections to make the industry safer (Borodaeff, 2015). In return, this issue is clearly damaging the industry and may eventually compromise quality assurance. It is worth noting, however, that these standards provide the foundation for risk management practices. Wagstaff (2015) for example points out that with regards to litigation and the court of law, the standards are considered best practices, thus offering a reference point as well. Thus, one could question if it would not be beneficial to enforce these standards on an industry-wide basis in collaboration with state agencies. In many industries, the mention of government involvement might be frowned upon and the aerial adventure industry is certainly no different. Wagstaff (2015) argues that state agencies may not possess the knowledge or expertise to successfully regulate the industry and as a result the rules may do more damage than good. This would appear a valid concern, hence this study is arguing for a collaborative approach to risk management within the industry, an approach that involves both private and public agencies. Indeed, collaboration evidently already exists within the industry. Organisations such as the ACCT and PRCA are great examples of such. Further, internationally the professional organisations are collaborating and sharing knowledge with each other as well. Wagstaff (2015) for example points out that the ACCT and ERCA collaborate on many issues.

Similar high-risk activities such as skiing or amusement rides have successfully been regulated with IAAPA (2014) estimating the chance of being seriously injured on a ride at a fixed-site park in the U.S. is 1 in 24 million. According to Billock et al (2015) data gathered between 1997 and 2012 showed an injury rate of 3.58 per one million US residents on zip lines. However, 67.7% of these injuries occurred between 2009 and 2012, perhaps indicating the growing popularity of the activity, but also the increasing interest in studying the activity. Indeed, between 2009 and 2012 the annual number of injuries requiring a hospital visit increased by 55.8%, thus clearly suggesting an increasing issue in regards to zip lines. It is worth noting, however, that the study carried out by Billock et al (2015) did not purely cover commercial operations, but also zip lines at schools and camps. Thus, it perhaps does not reflect the entire picture of what is happening within the commercial industry, but it does provide an indication. Similarly, the focus of this study is the aerial adventure industry, the commercial side of ropes courses, yet benefits to the non-commercial sector may also be derived from its findings. The study does recommend that all standards should be made uniform in all states and jurisdictions (Billock et al., 2015). Thus, the argument is that the standards developed by the aforementioned organisations should be combined to be more effective. Further, collaboration is currently taking place within the industry to continuously provide better standards for operators and builders to follow. For example, the ACCT has public comment periods prior to the development and/or updating of standards, something that took place in late 2015 for the Aerial Adventure Park Standards draft (Adventure Park Insider, 2015). Nevertheless, as mentioned earlier, these standards are in many cases not enforced.

2.4 – The History of Adventure Tourism

According to Cater (2013) people's interest in adventure stems from the everyday activities undertaken by our prehistoric ancestors. Despite thousands of years passing we still have the hormones in us to this day that essentially deepen our experience and bring with them a satisfactory feeling during adventure activities. For example, if humans feel threatened the natural reaction of the brain is to consider fight or flight and this thinking involves the 'aminergic system of the brain stem preparing the mind for action by heightening all the functions normally associated with waking' (Hobson, 1994: 161). Cater (2013) further points out that the body releases serotonin to make it more alert, whilst the autonomic

nervous system of the body releases both adrenaline to prepare for exertion and dopamine to prepare for injury. It is this process that occurs when people participate in adventure activities (Buckley, 2012) and perhaps why they are becoming increasingly popular. Indeed, it would seem adventure runs deep in humans. Phillips (1997) argued that it was partly our hunger for adventure and exploration that led to the colonisation of the world. Cater (2013) also notes that, whilst not voluntary, war has been a source of adventure for centuries. According to Cater (2013: 9) pure adventure is 'entwined with those of conflict'. The appeal lay in the escape of everyday life as well as the opportunity to travel. Upon return the men were then able to tell tales of their adventures (Cater, 2013). During Second World War, with people living away from home for long periods of time, new opportunities of travel became apparent and whilst war is obviously not tourism, it essentially opened people's eyes (Cater, 2013). In the immediate aftermath of Second World War surplus equipment further offered opportunities of adventure travel (Adventure Travel Society, 1999). For example, white water rafting 'owes an early debt to the availability of this hardware' (Cater, 2013: 9). Even adventure tourism institutions have existed since 1888 when the National Geographic Society was formed and which still functions today (UNWTO, 2014). However, adventure tourism as we know it today, the commercialised version, is a relatively new concept. For example, Hatch River Explorations was the first business to receive a National Park Concessioner permit for rafting in 1953 (UNWTO, 2014). Despite this, Europe, North America and South America today account for over \$263bn in adventure travel expenditure (UNWTO, 2014).

2.4.1 – Adventure Tourism: A Background Check

Today, adventure tourism is one of the fastest growing segments of the tourism industry (Tsaour et al., 2013; Page et al., 2006; McKay, 2013; Williams et al., 2009). According to Tsui (2000) around 50% of US adults took an adventure vacation in the last five years of the 20th Century. This segment is now recognised 'as a discipline in its own right' (Hudson, 2003: 14) and is currently valued at \$263bn globally (UNWTO, 2014). This represents an astonishing increase of 195% since 2010. ATTA (2011) further predicts that by 2050 approximately 50% of all travel will be adventure tourism. This statement is backed up by the UNWTO (2014) pointing out that a trend has emerged of established tourism operators adding adventure tourism activities to their product portfolios. Further, numerous countries in various stages of economic development are prioritising adventure tourism for market growth as it

enables destinations to differentiate by creating unusual and new products and activities (UNWTO, 2014; Page et al., 2006). Page et al (2006) for example argue that destinations achieve this by offering several adventure tourism products and activities to the mass market of which individuals may not necessarily need to be highly skilled to participate. Unlike mass tourism it supports local economies as well. According to UNWTO (2014) 80% of tourists' expenditure in mass tourism leaves the local destination, whereas almost 65% of adventure tourists' expenditure stays with the local destination. Adventure tourists also demand sustainable practices as nature is part of the attraction and as a result operators have to consider this aspect as the destination would otherwise lose its competitive advantage (UNWTO, 2014). Indeed, commodified adventure tourism has become a key part of contemporary tourism and it is therefore very important to the overall industry (Cater, 2006; Cloke et al., 2002). Further, in the past decade adventure tourism has also become a stand-alone, though complex, field of academic study (Swarbrooke et al., 2003; Beedie, 2005; Buckley, 2011).

A set agreement among experts on the definition of adventure tourism is still missing (see McKay, 2013; UNWTO, 2014; Cater, 2013; Callander and Page, 2003; Swarbrooke et al., 2003; Buckley, 2000). The Adventure Travel Trade Association (ATTA, 2014) defines adventure tourism as a trip that includes two of three elements: physical activity, natural environment and cultural immersion and includes both domestic and international tourists. According to Buckley (2006: 3) adventure tourism is 'guided commercial tours where the principal attraction is an outdoor activity which relies on features of the natural terrain, generally requires specialised sporting or similar equipment, and is exciting for the tour clients'. Most aerial adventure parks do not offer guided commercial tours, however, so it has to be pointed out that Buckley's statement is not entirely accurate today. Essentially, though, adventure tourism, and aerial adventure parks, is commercialised outdoor recreation. The participant experience has been described as 'a voluntary engagement in novel, uncertain and most often emotionally intense activity' (Holyfield et al., 2005: 174). Much earlier, Simmel (1971: 188) described the experience as an event with 'a beginning and an end much sharper than those to be discovered in the other forms of our experiences'. What is clear is that adventure constitutes a spectacular experience which is different from people's everyday lives, sometimes to the extreme, possessing the 'quality of a dream' (Simmel, 1971: 188). Finally, Zweig (1974: 190-91) concurred with the

comparison of the adventure experience and dreaming arguing that adventure is a ‘perpetual leap out of time and continuity into a dreamlike world of risk and violent action’.

Swarbrooke et al.’s (2003: 32) influential work on adventure tourism found that two different levels existed; ‘soft’ and ‘hard’ adventure. Soft adventure targets non-adrenaline junkies and families (Hudson, 2003) meaning that some adventure is included, but high levels of safety exists. This includes activities such as bird watching, volcano tours or canopy tours (Villalobos-Cespedes et al., 2010). Hard adventure is geared towards the “adrenaline junkies” where activities are physically demanding and may even present a potential risk to life and limb (McKay, 2013). This may include activities such as caving, climbing and trekking (UNWTO, 2014). For a more detailed list, see table 1. However, adventure is very much a personal experience and dependant on individual competence (NZMSC, 1993: 9), making it difficult to class the various activities. For example, what might be “hard” for one person might be “soft” for another person. The New Zealand Mountain Safety Council (NZMSC, 1993: 9) considers adventure as ‘an experience where the outcome is uncertain... but it must appear to the adventurer that it is possible to influence the circumstances in a manner which provides hope of resolving the uncertainty’. Due to the infancy of the industry, aerial adventure parks have yet to be classed specifically. Indeed, neither the UNWTO (2014) nor the ATTA (2014) have yet to list it as an adventure tourism activity. However, as canopy tours are included under soft adventure it can be suggested that given the similarities between the two activities this is also where aerial adventures should be included. Further, whilst some high levels of risks do persist in the activity, the vast majority have been eradicated through the creation of illusion of risk, hence the ‘soft adventure’ arguably being applicable.

Activity	Level
Archaeological expedition	Soft
Attending local festival/fairs	Other
Backpacking	Soft
Birdwatching	Soft
Camping	Soft
Canoeing	Soft

Climbing (mountain/rock/ice)	Hard
Caving	Hard
Cruise	Other
Cultural Activities	Other
Eco-tourism	Soft
Educational programs	Soft
Environmental sustainable activities	Soft
Fishing/Fly-fishing	Soft
Getting to know the locals	Other
Hiking	Soft
Horseback riding	Soft
Hunting	Soft
Kayaking/sea/white-water	Soft
Learning a new language	Other
Orienteering	Soft
Rafting	Soft
Research expeditions	Soft
Safaris	Soft
Sailing	Soft
Scuba Diving	Soft
Snorkelling	Soft
Skiing/snowboarding	Soft
Surfing	Soft
Trekking	Hard
Walking Tours	Other
Visiting friends/family	Other
Visiting historical sites	Other
Volunteer Tourism	Soft

Table 1: Examples of adventure activities and their levels of adventure (ATTA, 2013).

2.4.2 – Commercial Adventure Tourism and Risk: A Paradoxical Relationship

Today, adventure tourism is a commercial industry. For example, the mountains that people visit to ski are often developed resorts complete with restaurants, shops and hotels. As adventure tourism activities have become commercialised so has the range of potential participants widened (Cater and Smith, 2003) with the aim now being high levels of inclusivity. Even the most extreme adventures such as guided mountaineering in Nepal (Hales, 2006), have become commercialised. Whilst adventure tourism should not be considered mass tourism, it is clear that having become commercialised, or commodified, the aim is to get as high a throughput as possible, and has as a result become available to the masses (Rickly & Vidon, 2017). This is reflected in the extension of numerous adventure tourism activities to allow non-skilled people to participate (Page et al., 2006). According to Cloke et al (2002) commodified adventure is increasingly becoming a vital part of the overall tourism industry in the 21st Century. However, Beames and Varley (2013) point out that adventure tourism is still a niche segment, essentially blurring the line between purchasing a product and service. Many experts agree that the main ingredients and attraction to adventure tourism are risk, personal challenge and excitement (Cater, 2006; Bentley et al., 2010; Buckley, 2012; Page et al., 2006; Miles and Priest, 1999; Holyfield and Fine, 1997). However, the common adventurer does of course not seek actual harm and thus adventure tourism seems to present a paradox as pointed out by Buckley (2012) and Fletcher (2010). Naturally, risk and safety contradict each other and thus operators must downplay the risks involved and emphasise safety to a certain extent. If risks are perceived to be too high, for example, only few will participate (Kane and Tucker, 2004; Fletcher, 2010). Nevertheless, it would seem that adventure tourism functions on this paradox and maintaining this balance between perceived and actual risk would appear critical as a result. With the responsibility of participant safety having shifted from participants to operators, to a certain extent, as adventure tourism has commercialised (Cater, 2006) operators instead attempt to provide the appearance or illusion of risk without delivering genuine danger (Fletcher, 2010), thus creating a perceived risk instead. Essentially, the operator attempts to remove the risks, but at the same time maintain excitement. This study therefore posit the key attractions to adventure tourism are perceived risk, excitement and personal challenge as depicted in figure one, below. As a result, effective risk management becomes key to aerial adventure parks.

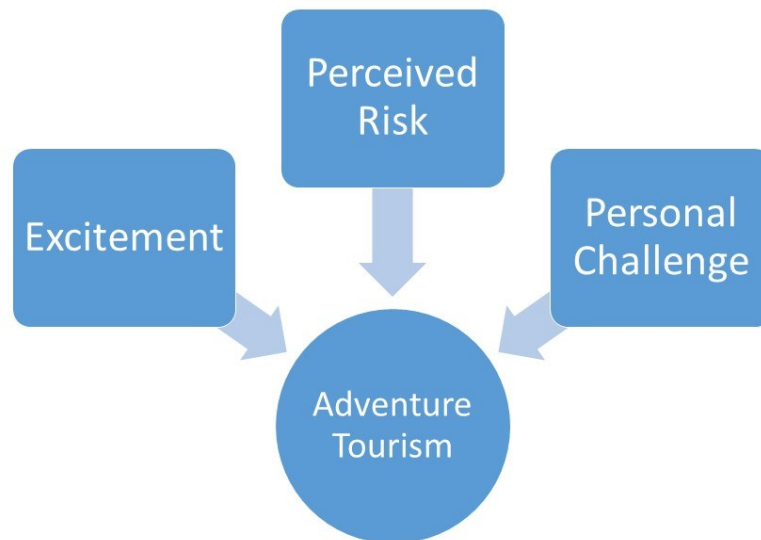


Figure 2. The key attractions to adventure tourism

2.5 - Risk management: an introduction

As has become evident in the previous section, risk plays a key role in commercial adventure tourism, but participants do not expect to face actual danger, leading to the phenomena of perception of risk. As a result, risk management is required to ensure that actual risk or danger becomes a mere illusion. However, a comprehensive risk management framework is currently lacking within the adventure tourism literature (Cheng, 2017). Managing and controlling risk is key to organisations (Eckles et al., 2014). Indeed, it has been argued that managing risk adds value to organisations as those with smooth cash flows have lower expected tax liabilities and financial distress costs for example (Froot et al., 1993; Eckles et al., 2014). Indeed, effective risk management decreases the likelihood of lawsuits and the likelihood of pay-outs and eventual increases in insurance premiums. Essentially, the main goal of operational risk management is to ensure that all operational threats to the organisation are identified and managed (Jallow et al., 2007). Risk management has received plenty of attention in other areas such as finance and insurance and, particularly, since the financial crisis of 2008 it could be argued, that no other term has received this level of focus (Huber and Scheytt, 2013; Power, 2009), albeit perhaps not in the desired form. Indeed, the financial crisis arguably showed that risk management is not

only vital to organisations, but also to regulators (Eckles et al., 2014). In the case of the aerial adventure industry, for example, the regulators' interest stem from public safety, being representatives of the public. However, even before the financial crisis, the interest in risk management had been growing at a steady pace (Huber and Scheytt, 2013). For example, today, the range of risk has increased from mathematical models to also focussing on human behaviour as well as psychology-based approaches that are relevant in regards to strategic decision-making (Rao and Goldsby, 2009). As such, this study will focus more on operations and the human behaviour side of risk management and not on the mathematical models as it concerns collaboration within the industry for effective risk management. Nevertheless, with the 2008 crisis in particular highlighting numerous shortcomings of risk management, resulting in concerns regarding the ability of the procedures in place to actually manage risk having been raised (Power, 2007). Power (2009) for example referred to it as the risk management of nothing, commenting that the mechanisms aimed at preventing such crises failed. To a certain extent, the crisis arguably damaged the reputation of risk management as a solution to uncertainty (Huber and Scheytt, 2013). Similarly so, when accidents occur at theme parks, risk management, and perhaps a lack thereof, is often the key subject (The Guardian, 2015; Bollington, 2015). Perhaps somewhat controversially, it can be argued that the growth of risk management is indeed down to its failings (Mikes, 2011).

2.5.1 – Defining Risk

Hopkin (2014) argues that in order to understand a risk, a detailed description is required to ensure that a common understanding of risk can be identified and responsibilities are understood. Arguably, the key word in Hopkin (2014) argument is *understanding*, for how can one prevent something from occurring if one does not understand it? According to the Oxford English Dictionary risk is defined as 'a chance or possibility of danger, loss, injury or other adverse consequences'. Risk, however, has numerous definitions, allowing it to be suitable to numerous industries, despite each defining risk differently (Hopkin, 2014; Norman and Jansson, 2004). The literature on risk and risk management in the social sciences sphere can be understood as purely a negative outcome (Mitchell, 1999). Researchers have, for example, pointed to the losses (Yates and Stone, 1992; Mitchell, 1999), negative effects (Godfrey et al., 2009) and negative consequences (Rowe, 1980) as a result of taking risks. Chapman and Cooper (1983) for example, described risk as the

possibility of incurring economic and financial losses or physical-material harm, due to an inherent uncertainty resulting from an action taken. On the other hand, in adventure tourism, participants associate risks with positive emotions (Ryan, 2003).

Nevertheless, the term risk is evidently used with a number of meanings. Jüttner et al (2003) argued that this is due to risk being referred to as sources of risk as well as the consequences of risk at other times. Indeed, Tang and Musa (2011) noted that the term risk can be so confusing that they found the concepts of risk sources and risk consequences more appropriate to use. However, Ritchie and Brindley (2007: 305) argued that most risk definitions had three dimensions in common: 'the likelihood of occurrence, consequences of the particular event or outcome occurring and casual pathway leading to the event'. Essentially, they argue, risk management attempts to address these three dimensions of the risk construct by analysing the sources, attempting to understand what might be the driving forces behind an event and how these could be managed to ensure a positive outcome instead (Ritchie and Brindley, 2007). The International Organisation for Standardisation (ISO) defines risk as the effect of uncertainty on objectives (ISO Guide 73, 2009). Further, ISO (2009) describes risk as an event, a change in circumstances, a consequence or a combination of these and the ways in which they are likely to impact on the achievement of objectives. Another definition of risk comes from the Institute of Risk Management, who defines risk as a combination of the probability of an event and its consequence, whether that is positive or negative (2002). Hopkin (2014) further argues that risk is best defined by focussing on risks as events, as does ISO 31000.

Hopkin (2014) identified three types of risk: hazard (pure) risks, control (uncertainty) risks and opportunity (speculative) risks. Hazardous risks are the type that can only result in negative outcomes, such as operational risks or insurable risks. Control risks are generally associated with project management as they increase uncertainty with regards to the outcome of a certain situation. Finally, opportunity risks are the ones commonly associated with investment banking. As the name suggests this type of risk involves the organisation taking a risk in order to make a return. Hazard risks are arguably the type aerial adventure operators face every day. This is likely to be an accident at a park. There is no positive outcome if this type of risk becomes actual. Annas (2016) further described four categories of risk that exist in the aerial adventure park industry: hazard risks, operational risks, financial risks and strategic risks. Operational risks originate from people or a failure in

processes, systems or controls. Financial risks originate from the effect of market forces on financial assets or liabilities, such as liquidity risk and price risk. Strategic risks arise from economic and social trends. Examples of this include changes in the competitive environment for example. A new competitor opening up nearby will pose a strategic risk, for example, as this will have an impact on the organisation's ability to achieve its objectives. Further, it can also lead to financial risks as it may impact the bottom line of the organisation's finances. The Federation of European Risk Management Association (FERMA) defines risk as a mix of the likelihood of an event and its subsequent consequences to the organisation (Oliva, 2016). Nevertheless, they are unavoidable to a large extent, essentially presenting a by-product of the objectives set as well as the way in which the organisation is run (Burnaby and Hass, 2009).

Kaplan and Mikes (2012) argued that risks fall into either of three categories: preventable risks, strategy risks and external risks. Preventable risks are internal risks, which the organisation can control and that should be eliminated as they are not desirable. This may include breakdowns in regular operational processes, such as equipment malfunctioning. This category can be managed through monitoring as well as guiding people's behaviour, staff as well as participants (Kaplan and Mikes, 2012). For example, in the aerial adventure industry, a training course takes place prior to entering the courses in order to instil the right attitude among participants. Of course, it is impossible for organisations to predict every single circumstances that might arise and cause risk management issues. The training course, for example, is only one of many risk management steps. Kaplan and Mikes (2012) thus argue that providing guidelines of the organisation's goals and values is the first line of defence in the hope that this training will provide the staff with the right tools to make the right decisions. Strategy risks are those that an organisation accepts it will have to take in order to achieve its strategic goals (Kaplan and Mikes, 2012). For example, there are inevitably some risks involved in having participants forty feet up in the air and racing thirty miles an hour down zip lines, but the alternative might be having a course one foot off the ground, which in all likelihood would not be as appealing. As a result, it would likely mean no participants on the courses and thus no business. In order for an organisation to manage these risks, a risk management system is needed to reduce the likelihood of them occurring. For example, if an operator is concerned about the likelihood of incidents occurring as participants transfer their carabiners from the belay cable to the zip line, it

may opt to purchase smart belays where only one carabiner can be moved at a time, thus ensuring the participant is always clipped on to a cable (Sweeney, 2016).

External risks commence outside the company and as a result take place outside its influence. Such examples could be natural disasters, such as hurricanes. These are also referred to as disruption risks in the literature (Kwak, 2014). Turtleback Zoo in New Jersey had to rebuild their aerial adventure park after Hurricane Sandy, for example (Independent Press, 2013). It is, of course, limited what an operator can do to manage such risks as external risks, but the management must still focus on identifying these risks and mitigate their impact (Kaplan and Mikes, 2012). In the case of Turtleback Zoo insurance would be a likely option to do so. Williams et al (1998) identified the sources of risk as the:

- Physical environment
- Social environment
- Political environment
- Operational environment
- Economic environment
- Legal environment
- Cognitive environment

COSO (2004) further divided the sources of risk into external factors and internal factors. Sources of risk can bring both negative and positive outcomes. As mentioned previously, this study is focussing on the operational risks to aerial adventure parks. Hazard is a circumstance that increases the likelihood of gains or losses as well as the level (Tchankova, 2002). Peril is close to the risk and only has negative outcomes. Peril may occur at any time (Tchankova, 2002). Finally, exposure to risk involves the resources or objects exposed to the possible gains or losses (Tchankova, 2002).

According to Slack et al. (2010) failures resulting in risks materialising could often have been avoided. Slack et al. (2010) further organised the sources of failure as: failures of supply, internal failures, failures deriving from product malfunction or services, failures deriving from customer failures and general environmental failures. To put Slack et al.'s (2010) work into the context of the aerial adventure industry, supply failure would for example constitute faulty harnesses being delivered. Internal failures include human failures of which there are two: staff leaving and staff doing their job, but making mistakes whilst doing it. The latter could for example involve a member of staff delivering a training

session incorrectly, thus resulting in the participants not knowing or understanding what is required when participating on aerial adventure parks. Organisational failure is another internal failure, which include failures of operating procedures as well as failures arising from the organisational culture for example (Christiansen and Thrane, 2014). An example of organisational culture being an issue could be over-emphasising the high throughput on the courses. Similarly, the culture within the industry overall might also be an issue. In this case there might be more attention paid to getting participants on the courses rather than the safety of the participants once there. A product or service failure might occur due to over-usage or a product being used in a different to which it was designed. This issue could be mitigated by daily inspections for example. Customer failures may arise from customers misusing a product. For example, a customer using the zip pulley on the belay cable from challenge to challenge could be considered a customer failure, although one could also argue that this may constitute a human failure as the customer may not have been told of the dangers involved in doing so.

2.5.2 – Risk Management and Its Purpose

Both risk assessment and risk management have today become considerably large scientific disciplines with numerous masters and PhD programs worldwide as well as several academic journals (Aven, 2012; Huber and Scheytt, 2013; Oliva, 2016). Further, in regards to this study, most risk management research has focussed on the single organisation, rather than an industry as whole. Nevertheless, given the numerous definitions of risk, researchers can to a certain extent appear vague which, in turn, can cause confusion over the understanding of risks (Manuj and Mentzer, 2008). Ritchie and Brindley (2007) argue that uncertainty is caused due to a lack of awareness or information regarding the occurrence of a particular event. As a result, an organisation is unable to predict such an event (Kwak, 2014). Vulnerability on the other hand refers to risky circumstances developing due to managerial decisions, industry trends, regulatory changes and external disturbances (Peck, 2005). In the aerial adventure industry, this could arise if an operator decided to lower its staff numbers, for example, which in turn would extend the response times to incidents on the courses.

Risk management is a relatively new discipline on a corporate basis and began to be studied after World War Two (Dionne, 2013). For example, Snider (1956) commented that

no books on risk management existed at that point and it was yet to become an academic discipline. According to Dionne (2013) the first academic book to be published on risk management was by Mehr and Hedges (1963). Risk management, though, has been rising in prominence in particular since Knight (2002) distinguished between risk and uncertainty (Huber and Scheytt, 2013). However, Daniel Bernoulli was perhaps the first to define and measure risk in 1738 (Verbano and Venturini, 2013). Bernoulli (1954) argued for measuring risk with the geometric mean and reducing risk by spreading it across a number of dependent events. As a result, the established understanding of risk is measured by two combined variables, namely probability and magnitude (Verbano and Venturini, 2013). Further, normative risk management theory generally remained restricted to elaborations of terminology based on theories of finance and behavioural insights up until the 1990s (Huber and Scheytt, 2013). However, due to publicised scandals, attention was widened to incorporate general questions of internal control as well with more emphasis on operational and reputational risks (Huber and Scheytt, 2013). Indeed, according to an AON survey (2009) the biggest fear among organisations is the risk of damaging the image or reputation of the organisation. Today, Jordan et al.'s (2013) risk map has become a mainstay in executive reports, for example.

Hollman and Mohammad-Zadeh (1984) argued that the risk management process consists of five steps: risk identification, risk analysis, risk management technique selection, strategy implementation and control. This process should be part of an entity's strategic development, thus designed, implemented and supported at the highest level (Dionne, 2013). There are four elements to risk identification: sources of risks, hazard factors, perils and exposures to risks (Tchankova, 2002). Head (2009) also defined risk management as the process of planning, organising, directing and controlling resources in order to meet set targets when unexpected bad or good events may occur. Further, Hopkin (2014: 38) defined risk management as 'a set of activities within an organisation undertaken to deliver the most favourable outcome and reduce the volatility or variability of that outcome'. This is also true in regards to this study, though the focus is of course on an industry as a whole, rather than the individual organisation. Through risk management, organisations are able to reduce uncertainty which in turn assists in ensuring the continuity of operations, but also helps in showcasing the organisation's image (Verbano and Venturini, 2013). As such, effective risk management helps strengthening a brand or an industry in general, such as the aerial adventure industry. For example, an aerial adventure park operator with no

accidents will have a better reputation than one, which has had to close down for months whilst it reviews its risk management procedures as a result of an accident. Therefore, one could argue that by implementing industry-wide risk management procedures, the various aerial adventure operators should have equal levels of risk management and therefore be judged equally on that matter. Such action is thus beneficial to the long-term sustainability of the industry overall. Di Serio et al (2011) argues that putting into place a risk management system is a long-term and dynamic process demanding constant improvement and must be incorporated into the strategic planning to be successful.

It is possible that risk management in industry emerged from the USA during the 1950s as a result of insurance costs becoming excessive and coverage thereby being restricted (Hopkin, 2014). This led to risk management becoming widespread in numerous industries (Huber and Scheytt, 2013). Today, insurance is instead seen as one method of controlling risks. Indeed, in both the public and private sectors, risk management is today considered the foundation of good governance as well as management control (Miller et al., 2008; Scheytt et al., 2006). Hood et al. (2004) for example, discussed the increase of risk regimes in the public sector. Further, despite its criticism post the 2008 crisis it is still considered a possible solution to issues such as financial turbulence (Millo and MacKenzie, 2009). Undoubtedly, with accidents at aerial adventure parks or theme parks in mind, risk management is considered more important than ever (Huber and Scheytt, 2013). Two reasons are often cited for the management of risk, namely managerial self-interest and the cost of financial distress (Eckles et al., 2014). In other words, by not managing risks the likely negative outcome will not only reflect badly upon management and subsequently even lead to job losses, it may also lead to major financial losses due to litigation for example. Risk management relies on various institutional dynamics (Arena et al., 2010) though, to a certain extent, it is only able to serve the public 'with certifiable quasi-commodities in an ongoing quest for organisational virtue and legitimacy' (Tekathen and Dechow, 2013: 100). As a result, Roberts (2009) argued that an ethic for intelligent accountability should be developed. Huber and Scheytt (2013: 90) further point out that the rise of risk management stems from a 'pervasive logic of reputation and precautionary risk, which appeals to contemporary images of manageability'. Indeed, Power (2005, 2007) and Power et al (2009) described the connection between risk management and global ideals of transparency and accountability. To a certain extent, risk exists in all the actions or decisions we make as humans, in various businesses and their activities and in every area of

management of an organisation (Verbano and Venturini, 2013; Tchankova, 2002). In most cases these risks can be predicted, either through experience or by trying to better govern the disorder (Verbano and Venturini, 2013). It is through risk management that organisations and industries are able to identify risks, measure the likelihood of an event occurring as well as the potential impact of that event and through this process treating risks, remove and/or reduce the impact (Verbano and Venturini, 2013). Risk management would, for example, enable the aerial adventure industry to handle risk and uncertainty through the development of a reference framework (Dionne, 2013).

2.5.3 – Operational Risk Management

Operational risk is arguably the most compelling risk organisations face (Samad-Khan, 2008). Increasingly it is gaining attention as a source of risk within organisations (Mitre et al., 2015). Operational risk can be defined as the risk of negative impact on operations from an operational failure (Samad-Khan, 2008). As a result, the overall success of the organisation depends on reducing operational risks (Jallow et al., 2007). It is experienced by all types of organisations, regardless of the industry (Mitra et al., 2015). Hahn and Kuhn (2012) argues that operational risk is caused by the uncertainty of future events in the normal course of business. In many respects having a well-developed operational risk management system in place can even lead to a competitive advantage (Jallow et al., 2007; Slack et al., 2010). Nevertheless, no matter how much time and money is spent on improving operations, there is always a risk that something unexpected might occur, such as equipment failure. Evidence of this can, for example, be found in the Alton Towers accident on 2nd June, 2015 (Bowers, 2015). In this case, a brand new ride crashed and severely injured a number of participants (Maclean-Bristol, 2015; Boyle, 2015). Indeed, risk management has become an increasingly difficult prospect in operations management due to the numerous sources of it, such as suppliers going bankrupt, changes in demand as well changes to operations (Slack et al., 2010; Andersen, 2010). The aerial adventure park industry, for example, is particularly dynamic, as has been stated previously, and with numerous personal protection equipment (PPE) products being developed constantly (Mettler, 2016) regular changes to operations are a given. This further leads to increased risks. With this in mind, communication between the various organisational levels as well as between organisations in general becomes key (Christiansen and Thrane, 2014). As such, knowledge transfer, is a key aspect of risk management with regards to the identification, assessment and response to risks as knowledge is transferred through the organisation or

within the industry as a whole (Mikes, 2011; Drew et al., 2006). This latter point evidently requires effective collaboration within the industry, an issue which is covered in chapter three of this study.

Slack et al. (2010) further argues that successful operations risk management procedures involve four sets of activities: identification, prevention, mitigation and recovery. The latter involves devising plans and procedures to assist the organisation in recovering from an operational failure after it has happened. The importance at this stage is to understand why a failure has happened. Slack et al. (2010) argues that this activity includes: accident investigation, failure traceability, complaint analysis and fault tree analysis. First, however, it is key to understand the likely sources of risk and then assess the risk for its likelihood to occur [low or high] (Slack et al., 2010). This process involves inspections or audits of the park. Once the effects of a potential failure have been determined, the organisation needs to attempt to prevent the failure from actually occurring. Slack et al. (2010) argues this can be achieved through either redundancy, fail-safing as well as maintaining the physical facilities. In this case, having a redundancy refers to having a back-up system or component in place in case of a failure. Fail-safing on the other hand is ingrained in operations to prevent unintentional human error, which is the root cause of most failures (Slack et al., 2010). For example theme parks have height bars to ensure participants do not exceed size limitations. Similarly, many aerial adventure parks have weight restrictions around 250lbs (Annas, 2016). Some parks colour-code areas on the courses to indicate the level of challenge involved. Another point is the technological development taking place in the aerial adventure industry, which enables operators to create the illusion of risk whilst reducing actual risk considerably (Sweeney, 2016). This is, for example, achieved through the aforementioned smart belays (Annas, 2016). Finally, facility maintenance is another key area of risk management and involves both operator and builder inspections. Slack et al. (2010) argues that benefits of maintaining one's facilities include enhanced safety, increased reliability, higher quality, lower operating costs and longer lifespan. Basic wear and tear is bound to occur on facilities, for example, but through regular maintenance the effects of this can be reduced, which may in turn prevent incidents from occurring. Ramirez et al (2015) further argue that whether an organisation is capable of preventing, adapting, mitigating and recovering from unexpected and negative events can mean the difference between surviving or not in worst-case scenarios.

Through the use of tools such as prevention, retention and insurance, risk management provides a process that protects an organisation, or an industry in general, against losses that may occur (Verbano and Venturini, 2013). Similarly, Annas (2016) argues that operational risk management begins with three methods: avoid the risk, control the risk and transfer the risk to another party. Of course, in the aerial adventure industry, avoidance is in many cases impractical as to completely eliminate the risk would mean to close down. Nevertheless, Annas (2016) points out that operators need to decide whether the benefit to certain risks outweigh the costs, for example when adding a new activity. With regards to controlling the risk, this involves taking the right measures to reduce the likelihood and/or severity of injury. As a result this is perhaps the most important risk management technique in this industry. Annas (2016) describes the most common control measures as: staff training, background checks on employees, cross check waivers with IDs, visible signage, weigh all participants, inspections, access prevention and the development of a safety committee. Jamal and Getz (1995) also called for a similar group in their study on collaboration in tourism for ongoing monitoring and re-evaluation, similar to Waddock and Isabella (1989). As such, this safety committee would be created for the entire industry through collaboration. Nevertheless, there are some risks that are bound to occur in the aerial adventure park industry, such as rope burns and minor slips or falls, simply due to the nature of the activity. Thus, an operator needs to decide what level of loss, in monetary terms, it can withstand each year for incidents (Annas, 2016). For example, a \$20,000 loss each year may be acceptable, in which case the operator may choose to accept this level of loss through a deductible and in return get a reduction in insurance premiums (Annas, 2016). Transferring the risk is another risk management option. Whilst insurance is perhaps the most obvious option in this case, it is also the most expensive. Indeed, Annas (2016) argues that other measures include: only using certified builders [e.g. ACCT certified builders], using third-party and certified trainers and inspectors and participant waivers. The latter option, for example, transfers the liability onto the participant. All of these options seek to transfer some of the risk or liability onto a third-party be it the builder, trainer or participant.

With the increased attention on risk management in academia as well as in the corporate world, a number of frameworks have been developed over the past decades (Verbano and Venturini, 2011; Tekathen and Dechow, 2013) such as strategic risk management, financial risk management, enterprise risk management, insurance risk management, project risk

management, engineering risk management, supply chain risk management, disaster risk management and clinical risk management. This study will focus upon the application of enterprise risk management, a financial risk management framework, in the aerial adventure industry due to its comprehensive outlook on all risks faced by an industry (Arnold et al., 2015). In light of the acknowledged lack of a comprehensive risk management framework within the adventure tourism literature, ERM is deemed the most suitable option.

2.5.4 – ERM: from finance to adventure

The adventure tourism literature is currently lacking a comprehensive risk management framework, despite much of the literature focussing on its relationship with risk (Cheng, 2017). Over the past few years enterprise risk management (ERM) has developed into an ever applicable tool to manage risk, particularly corporate risk (Gatzert and Martin, 2015; Lundqvist, 2015; Arena et al., 2010; Hoyt and Liebenberg, 2011; Oliva, 2016). It has quickly become the leading strategic management approach within financial organisations as they deal with the “risk management of everything” (Arnold et al., 2015; Power, 2007; Mikes, 2009; Mikes, 2011). Indeed, today ERM plays a major role in corporate governance (Demidenko and McNutt, 2010). Unlike the common silo-based type of risk management where risks are managed individually, ERM focusses on an organisation’s complete risk portfolio allowing it to make calculated operational and strategic management decisions, which may then lead to a competitive advantage (Gatzert and Martin, 2015; Bromiley et al., 2015; Choi et al., 2015; Brustbauer, 2014; Nocco and Stulz, 2006; Stroh, 2005). In other words, through ERM organisations are able to consider all the risks facing them as it takes a consolidating approach (Hopkin, 2014; Lundqvist, 2015; Gordon et al., 2009). Given the numerous risks aerial adventure parks attempt to negate, such an approach to risk management would appear ideal. Further, this all-inclusive approach makes it an ideal tool for risk management on an industry-wide basis, because of its structure and the consolidating approach making large-scale risk management more manageable.

Due to increasingly dynamic business environments, organisations are required to possess the capabilities to prepare for and react to unexpected events that are strategically important (Sax and Torp, 2015), which is very much the case in the aerial adventure industry. Indeed, success down the road is reliant on organisations being able to

adequately respond to said events (Sax and Torp, 2015). As such, it is perhaps not surprising that some commentators have argued that the 2008 financial crisis was, among other reasons, a result of a system-wide failure to fully implement ERM and that by adopting ERM the situation may not repeat itself (Eckles et al., 2014; Harner, 2010). ERM is, however, traditionally, a financial risk management tool. This study will, however, argue that due to its comprehensive outlook on the risks that an organisation faces, it is an ideal tool for the aerial adventure industry. As such, this study turns the traditional focus of ERM on the individual organisation to the industry instead. In other words, the focus of ERM changes from a micro level to a macro level.

It has generally been accepted that the Committee of Sponsoring Organisations of the Treadway Commission's (COSO) definition of ERM is the most accurate to date (Arena et al., 2010; Gatzert and Martin, 2015; Beasley et al., 2005). COSO's (2004: 2) *Enterprise Risk Management Integrated Framework* defines ERM as:

'[...] a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives'

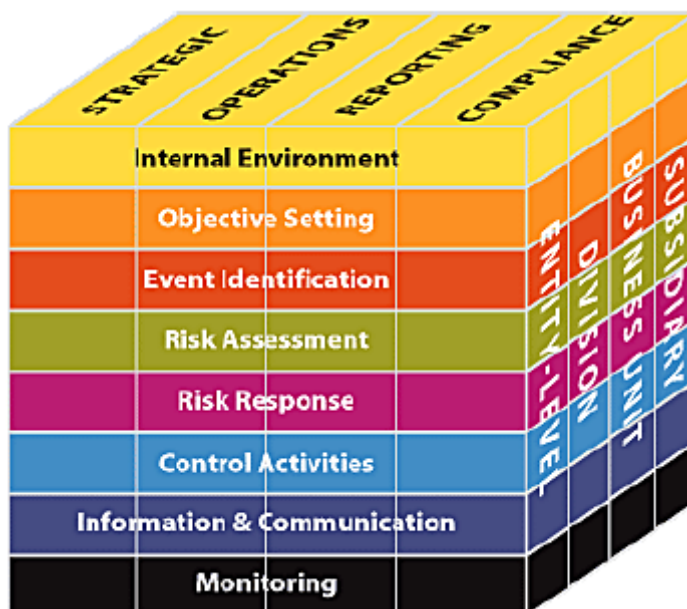


Figure 3 Source: COSO (2004).

This framework shows the relationship between the objectives of the organisation and the risk management components in a three-dimensional matrix, taking the shape of a cube (Althonayan et al., 2011). The vertical columns show four categories of organisational objectives - strategic, operations, reporting, and compliance. The horizontal rows show the flow of ERM processes. Finally, the third dimension shows the organisations' units. Once again, aligning ERM with overall strategy is highlighted. Essentially, ERM is a combination of traditional risk management and risk governance. Being part of the overall strategy of an organisation means that ERM is directed top-down by senior management (COSO, 2004; Soltanizadeh et al., 2014). As a result, senior management defines the objectives of the ERM plan whilst also being responsible for the implementation of the plan (Gatzert and Martin, 2015). To oversee this, ERM therefore generally includes the appointment of a Chief Risk Officer (CRO) a position that does not normally exist in other risk management approaches (Liebenberg and Hoyt, 2003). In other words, whilst all risks are consolidated through ERM, a senior manager is also in charge of overseeing the entire process. Therefore, one would imagine the process would be more organised and controlled. The safety committee responsible for implementing ERM in the aerial adventure industry would require a CRO as well, a point which will be further explored in the next chapter. Further, ERM proposes that organisations are able to succeed on the basis of risk management similarly to the ways in which organisations compete with regards to efficiency, costs, labour and so on (Walker, 2013). Wu et al (2010) identified enterprise risks as external, internal and procedural. For example, individuals may follow procedures blindly, not questioning their own actions and thus not realising the risks they may be creating. Further, Wu et al (2010) argued that the impacts of these sources of risk are interdependent.

Eckles et al (2014) argue that ERM offers a profound paradigm shift from the classic silo-based approach to managing risks in a holistic manner rather than individually. Collier (2009) further emphasises the importance of ERM for managing an organisation by integrating strategic planning, operations management, performance management and internal control. Indeed, the adoption of ERM by organisations has been promoted by a number of professional associations, legislative bodies and regulators (Bromiley et al., 2015; Lundqvist, 2015; Arena et al., 2010). As a result, financial organisations are increasingly adopting ERM programs (Arena et al., 2010). McKinsey (2010) devised a best-practice ERM model, arguing that ERM is most effective when presented in five interrelated dimensions. The dimensions are: 1) risk transparency and insight, 2) risk appetite and

strategy, 3) risk processes and decisions, 4) risk governance, and risk culture. Through this model, the organisation is able to view the alignment of ERM with respect to the risks facing the business (Althonayan et al., 2011). Step one focusses on identifying and analysing the risks, whilst also gauging the impact the risks might have on the entire industry. Step two involves outlining the risk profiles and subsequently expanding it or contracting it. At this time, the organisation needs to determine how much risk it can accept. Step three focusses on embedding risk context on a number of operational processes in the most efficient way. Four and five involves respectively allocating enough risk management resources and ensuring the existing risk culture gaps are acknowledged and understood by everyone.

ERM identifies and assesses the likely consequences of risks and through this process eventually offers the best option for the management of said risks (Choi et al., 2015). Essentially, the focus is on identifying, assessing and responding to strategic, operational and financial risks, whilst also recognising threats and opportunities facing the organisation (Soltanizadeh et al., 2014; Pagach and Warr, 2011; Bhimani, 2009). By doing so, Harner (2010) argues that four objectives should be achieved: 1) strategy, 2) effective and efficient operations, 3) reliable reporting, 4) compliance with applicable regulations. However, Gordon et al (2009) argued that the relation between ERM and an organisation's performance relies on five factors: environmental uncertainty, industry competition, size of organisation, the level of complexity in the organisation, and board of director's monitoring. As a result of these factors, Gordon et al (2009) further argue that organisations should contemplate adopting an ERM program in combination with these variables surrounding the firm. For example, the situation in the aerial adventure industry is arguably particularly complex due to it involving numerous stakeholders and not just a single operator. As an organisation implements ERM, the risk management processes move from placing attention on compliance and prevention to a strategic approach with a focus on identifying risks and responding (Arnold et al., 2015). This move has, in particular, been encouraged by stakeholders' animosity towards uncertainty with regards to risks as well as increased competition (Arnold et al., 2015). Power (2009) further argues that it is now expected that organisations ingrain risk management and other internal control systems in the business processes as part of implementing an ERM system.

2.5.4.1 – The Purpose of ERM

ERM promotes the development of a business strategy to assist in the prevention of losses or even business failure, whilst also enabling the organisation in the pursuit of opportunities (Gordon et al., 2009; Burnaby and Hass; 2009; Killackey, 2009). Indeed, connecting risk management with strategy is the key feature of a successful ERM system (Burnaby and Hass, 2009). It is important to align ERM systems with strategy as organisations, or industries such as the aerial adventure industry, are exposed to a variety of risks at a number of levels and the ERM system needs to safeguard all levels (Althonayan et al., 2011). Harner (2010) points out that effective implementation of ERM as a result involves objective setting, risk assessment, risk response and communicating and monitoring the organisation's risk position in general. In the aerial adventure industry these activities therefore become a collaborative effort, particularly in regards to communication, as these will be required on an industry-wide basis for ERM to be successfully implemented. Once again, knowledge transfers between the industry stakeholders is key. Nocco and Stulz (2006) further argue that ERM creates value as it improves the industry's capability with regards to carrying out its strategic plan, as it minimises costs.

It has been argued that organisations who embrace ERM have better governance as risk governance assists in ensuring risk integration (Baxter et al., 2013; Altunas et al., 2011). Indeed, Lundqvist (2015) argues that risk governance is key to the integration of ERM across the firm. Combining the management of all risks with a well governed system will lead to an integrated risk management system, which is ERM (Lundqvist, 2015). Sax and Torp (2015) also point out that ERM encourages risk awareness and the understanding of risk to managers as well as employees throughout the organisation. As a result, one could argue that this particular approach is more effective and efficient than other risk management approaches due to the entire organisation essentially participating in the management of risk. Indeed, this is an area considered key to ERM as ideas and information from employees at any level within the organisation are considered (Sax and Torp, 2015). This approach is relatively recent, having been developed during the 90s with an emphasis on management (Choi et al., 2015). Shortly after, ERM was recognised as one of the 'breakthrough ideas for 2004' by the Harvard Business Review (2004). ERM, as a concept, was developed as organisations sought an approach to corporate governance that would bring new standards, processes, rules and transparency for all involved (Oliva, 2016).

Research has so far focused on three areas; explaining the practice, analysing the determinants of ERM adoption and gauging the valuation effect of ERM (Eckles et al., 2014). Yet, much of the literature focuses on the individual organisation, rather than the industry as whole, which is the focus of this study.

Further, researchers have called for further research into areas such as a) the advantages of implementing ERM; b) the technical and cultural difficulties that may arise when implementing ERM; c) gauge whether ERM actually adds value to the firm, as argued (Beasley et al., 2005; Oliva, 2016; Hoyt and Liebenberg, 2011). Particularly post the 2008 financial crisis, the concept has gained further popularity and has, as a result, also become a major area of interest academically (Choi et al., 2015). One of the key benefits to ERM with regards to academic research is that it can be applied to a number of fields (Choi et al., 2015), though at this stage it has predominantly been used in financial and insurance areas (Soltanizadeh et al., 2014). Indeed, it has yet to be utilised in the academic field of adventure tourism, or tourism in general for that matter. However, further research in regards to the adoption of ERM programs among organisations is needed (Razali et al., 2011; Sax and Torp, 2015) as well as industry-wide implementation, the latter being the focus of this study. Mikes and Kaplan (2014) for example argue that the approach is to a certain extent still unproven and still emerging and as a result further research is required to develop the knowledge of how to ensure the risk management system is most effective (Sax and Torp, 2015). In industry, a need for more structure, organisation, accountability and communication with regards to risk management has been recognised, a role that ERM clearly fulfils (Lundqvist, 2015), therefore making it ideal for the aerial adventure industry as well. With the presence of organisations such as the ACCT, certain levels of organisation, structure and knowledge transfers already take place within the aerial adventure industry, but lacks accountability. Lundqvist (2015: 444) further argues that ERM is ‘a natural solution to the pressures for better governance of the risk management system’, an area that the aerial adventure industry needs improving as argued in section 2.3 of this chapter.

With its growing importance, however, ERM has also undergone a shift in regards to its focus from risk integration to risk governance (Altunas et al., 2011). As a framework, it is similar to other theoretical risk concepts and offers broad guidance with key principles, but leaving the details to the individual organisation (Brustbauer, 2014). As a result of the lack of concrete advice, ERM systems are different from organisation to organisation (Beasley et

al., 2005). One could argue that this criticism would also be valid in the case of the aerial adventure industry, as each operator will have unique parks. Thus, whilst the industry could develop a general set of ERM procedures for all operators to follow, one would expect each to vary from the other. However, ERM has been criticised for not delivering the desired results on a number of occasions (Beasley et al., 2008). Green and Jennings-Mares (2008: 1) also pointed out that ERM is more successful where the development of a 'consistent risk culture' throughout the organisation has taken place. As such, Harner (2010) argues that risk management must be included in an organisation's infrastructure and be a part of the organisation's operating activities to be most effective. Evidently, the most senior management therefore play a key role in implementing ERM and ensuring it is effective (Harner, 2010). Hoyt and Liebenberg (2011) further argue that ERM provides better risk awareness for organisations, which in turn enables them to make stronger operational and strategic decisions. Nocco and Stulz (2006) for example point out that ERM is a process that identifies, assesses and manages single risks within an integrated and strategic framework. Further, by doing so, the aerial adventure industry is able to improve the effectiveness and efficiency of the risk management program for the industry as a whole.

A 2011 survey found that out of 1431 US financial organisations, only seventeen percent had fully integrated an ERM program (RIMS, 2011). As such, whilst organisations may have adopted parts of an ERM program, it would seem, despite its apparent popularity, it has yet to be fully implemented in many organisations (Arnold et al., 2015). One could therefore argue that the aerial adventure industry would need to also ensure that operators fully implement the ERM framework. Power (2004) further argued that some organisations are caught in a cycle of counting risks, meaning the development of individual risk measures. In turn, these risk measures offer a false sense of *controlling* risks until they reach the point where there is a crisis, in which case the risks are not controlled and the organisation suffers. Typically, the organisation responds by measuring more risks which leaves the organisation in a cycle of calculation where the process of counting to control is thus repeated whenever there is a crisis (Arnold et al., 2015; Power, 2004; Mikes, 2009). Essentially, the attention paid to individual risks fails to offer any strategic vision and thereby organisations who attempt to risk manage everything end up risk managing nothing, i.e. the risk management of nothing (Power, 2009). As becomes clear this calculative culture of developing numerous risk measures does, however, not lead to effective risk management as it does not provide an integrated system. Enterprise risk

management concerns the management of risks that may affect the objectives, key dependencies or main processes of an organisation (Hopkin, 2014). By considering all risks faced by the organisation, ERM is able to address possible relationships between risks, unlike standard risk management approaches (Hopkin, 2014).

2.5.4.2 – ERM: From Micro to Macro Level

Essentially, the ERM approach systematically evaluates risks holistically across parks, within the aerial adventure industry, enabling the individual organisation to prioritise resources, and the industry in general to apply a portfolio thinking whilst also focus on strategic risks that the individual organisation may not be aware of (Pagach and Warr, 2010) through the sharing of knowledge across the industry. As such, everyone within the industry is aware of what risks are facing the organisation. This in turn enables the organisation to sense and respond to the risks that may appear, whether they are threats or opportunities (Mikes, 2011). Indeed, it is this holistic approach that, among other strengths, makes industry-wide ERM implementation ideal in the aerial adventure industry. This approach allows the industry to consider numerous risks together. So for example, in the case of this study, a collaborative arrangement such as a safety committee could utilise ERM as a tool to achieve effective risk management on an industry-wide basis by employing a holistic approach, absorbing the knowledge from the individual stakeholders and subsequently transferring it out to the industry. As a result, ERM reduces the marginal costs associated with reducing risk, and this in turn encourages profit-maximising organisations to further lower total risk while also increasing firm value (Eckles et al., 2014). However, as is becoming increasingly clear, collaboration is an essential part of ERM.

Similarly, the all-inclusive approach further makes it an ideal risk management framework for an industry. As is the case with the entire organisation participating, by involving the entire industry, the procedures become much more comprehensive and effective as a result. As such, in the case of this study, the focus of ERM turns from a micro-level [the individual organisation] to a macro-level [the industry], yet still employs the same system albeit at a larger scale. Andersen (2010) further argues that the resulting increased level of responsiveness, adaptability and speed further increases the effectiveness of risk management. For example, improved responsiveness relies on the decentralisation in regards to participation or autonomy, whilst it is supported by management through a participative leadership style (Andersen, 2010). As stakeholders transfer knowledge, the

industry as a whole is able to respond and adapt to situations such as accidents caused by equipment failure. Similarly, this is arguably one of the strengths of ERM that makes it ideal for implementation at an industry-wide level. In an industry-wide scenario, all stakeholders play a key role in its implementation and future success. Further, this again leads back to the need for stakeholder collaboration within the industry. Thus, the industry on a whole, arguably requires structure as well as monitoring and reporting systems to both holistically and strategically identify, gauge and focus on risks across the organisation (Sax and Torp, 2015; Harner, 2010).

However, for this system to be effective, the relevant information has to be communicated from the industry safety committee to the individual organisations. This enables the industry to make the accurate decisions (Harner, 2010). For example, as has been explained, aerial adventure operators will face some unique risks due to parks being different from each other. However, at the same time, the industry must possess a culture where employees are empowered and encouraged to identify, address and notifying management of possible risks (Sax and Torp, 2015), also known as entrepreneurial judgment (Foss and Klein, 2012). Indeed, it has been argued that by empowering employees, risks are more likely to be identified and dealt with in a quicker manner (Sarpong and Maclean, 2014; Sax and Torp, 2015). Thus, the successful empowerment of employees plays a key role in the overall success of an ERM system. As an example, at an aerial adventure park, this would equate to employees working on the courses being encouraged to notify management of any potential risks they may have discovered. However, if management dismisses concerns brought by employees, ERM is unlikely to succeed (Drew et al., 2006). Indeed, Sax and Torp (2015) call for a management culture supporting knowledge transfer and learning processes. This point is also relevant for the industry as a whole with the knowledge transfer and learning processes being key to the success of implementing ERM on an industry-wide basis as well as its future success. For without knowledge from the individual organisations, how could it succeed? Indeed, this perhaps provides the foundation for ERM in the aerial adventure industry.

2.6 – Conclusion – Introducing IERM to the Aerial Adventure Industry

Aerial adventure parks are becoming increasingly popular activities. Whilst aerial adventure activities have yet to be classed as adventure tourism activities, this study has taken the liberty of doing so in light of the many shared characteristics, as explained at the beginning

of this chapter. Further, visitor attractions, such as aerial adventure parks, play a critical role in the making and maintaining the long-term sustainability of tourism destinations. Like tourism and adventure tourism, the aerial adventure industry has experienced a considerable growth, particularly in the last decade or so. Having experienced a 195% growth in the space of just a few years, adventure tourism has undergone major changes as it has become ever commercialised and thus available to the masses. Such activities, which years ago were perhaps more for the specialised individuals, have now become mainstream, meaning that “Average Joe” can also participate in extreme sports despite having never done anything like it before. Major operators like Go Ape and Ropes Courses Inc. continue to erect numerous sites annually that are all more or less uniform, much like a McDonald’s franchise and the customers want more. By building cookie-cutter sites, operators are able to focus on areas that the customer does not see, such as minimising risks. Activities such as aerial adventure parks do, after all, have the potential of posing high levels of risks, both physically and emotionally to participants, but by bringing such activities out to the masses operators attempt to ensure that these risks are mere illusions. This chapter, for example, argued that customers do, to a certain extent, want to experience the rush that comes from undertaking risky challenges, but they do of course not want to experience actual harm. Customers want to experience the fear of the unknown without getting hurt. They are drawn to experiences of positive outcomes, such as fun, excitement or even self-discovery and insight, as pointed out early on in this chapter. Adventure tourism activities have become popular partly as they allow participants to exercise self-control over risks and to push personal boundaries.

Unlike traditional adventure recreation, the individual is, to a certain extent, no longer responsible for his/her own safety. That responsibility now largely resides with the operator. As a result, the onus is on the operators and the builders to create activities that involve the perception of risk, but very little actual risk. The activities must be challenging for the masses and thereby satisfy their needs, yet still remain safe. However, as the industry experiences incredible growth, so has the number of accidents, as seen in Billock et al. (2015). As a result, one could certainly argue that the current risk management procedures may not be efficient. In order to succeed in this area, effective risk management becomes critical. The aerial adventure industry is faced with numerous challenges posed by the risky nature of the activity and as a result, risk management must be a by-product of its objectives. This chapter has, for example, argued that effective risk

management has a positive influence on branding and reputation of the individual organisation as well as an industry overall, benefitting the long-term sustainability of the aerial adventure industry. More importantly, however, better risk management procedures could have prevented some of the accidents that have occurred in the industry. However, despite the aerial adventure park experiences becoming somewhat uniform, the risk management procedures are not. As has been pointed out in this chapter, organisations such as ASTM, ACCT and PRCA have all written standards available for operators and builders to follow, yet in many cases it is not compulsory to do so. Further, it has been argued that said standards should be combined to ensure all parks operate to the same standards, which provides part of the reasoning behind this study to focus on an industry level, rather than the individual organisation.

As is the case with adventure tourism in general, a comprehensive risk management framework is clearly required (Cheng, 2017), something that is evidently lacking both in the literature as well as in practice. This chapter has argued that enterprise risk management provides the ideal tool for a comprehensive risk management framework for the entire aerial adventure industry. A traditional financial risk management tool, its all-inclusive and holistic approach to risk management makes it an ideal tool for an industry-wide approach to risk management as it enables the industry to see the bigger picture. With a focus on industry, rather than the individual organisation, one could refer to the system as Industry-wide Enterprise Risk Management (IERM). IERM involves everyone within the industry, from the bottom of the individual organisations to the top of the industry, encouraging risk awareness throughout the industry and empowering employees to identify and communicate risks. This in turn makes the industry more responsive to changes and allows it to make calculated and strategic decisions. The increased responsiveness is key in the aerial adventure industry, due to its dynamic nature, meaning changes occur on a regular basis. Further, as the chapter has explored, the structure and consolidating approach of IERM makes large-scale risk management more manageable, whilst also providing better governance of risk management systems, an area that is lacking behind in the aerial adventure industry currently. In addition, IERM provides the infrastructure required to facilitate industry-wide risk management. IERM also allows each system to be slightly different, making the approach ideal for the industry, given each aerial adventure park is slightly different and thus facing different risk management challenges in some cases.

Nevertheless, in order for this to be a successful, the development of a safety committee in the aerial adventure industry is required, something which the ACCT or the ASTM perhaps already have the infrastructure to provide. Heading this, would be a Chief Risk Officer, a position not normally available in other risk management systems. Knowledge is transferred from the individual operator or builder to the safety committee overseeing the process for the whole industry. The appointment of a CRO to take leadership of this approach therefore makes sense as the safety committee disseminates relevant risk management information or changes out to the rest of the industry. As such, it becomes clear that knowledge transfers are key to the success of IERM in the aerial adventure industry and to achieve this, stakeholder collaboration becomes a requisite. This enables vital knowledge to travel from the bottom of the individual organisations to the industry safety committee, which is then able to share this knowledge with the rest of the industry. Thus, to fully implement IERM in the aerial adventure industry, the stakeholders within the industry must collaborate to develop effective risk management procedures and provide governance to maintain the effort in the long-term. The following chapter will therefore explore collaboration theory focussing on the requirements and barriers to stakeholder collaboration as well as the role of knowledge management and stakeholder management.

Chapter 3

3.0 – Stakeholder Collaboration

3.1 - Introduction

Collaboration theory and stakeholder theory provide the foundations of this study and as a result this chapter will explore these theories. In chapter two the importance of collaboration and knowledge transfers to effective risk management was discussed. It is widely recognised today that a majority of the issues faced by stakeholders within the tourism industry, as well as society in general, cannot be solved single-handedly and as a result collaborative arrangements are becoming increasingly popular. In this case, the arrangement would take the place of an industry safety committee as recommended in chapter two if this study. Having offered a risk management framework in chapter two, chapter three offers a path to implementation of said framework.

Due to the shared characteristics, and limited research on all aspects of stakeholder collaboration within adventure tourism, literature on stakeholder collaboration within tourism, destination management and crisis management were predominantly researched (see Fyall et al., 2012 and Jiang and Ritchie, 2017; Wang and Fesenmaier, 2007; Beritell, 2011 for examples), with some literature from the wider business management context also included (for example Ansell and Gash, 2008). The tourism system consists of linkages and interdependencies among stakeholders from different sectors with different views and values (Jiang and Ritchie, 2017). This has undoubtedly created a complex and dynamic environment, whilst also making cross-sectoral collaboration critical in managing complex issues (Bramwell, 2011). Neither government on its own, nor a single powerful tourism organisation is capable of successfully creating a tourism destination or solving complex issues (Saito and Ruhanen, 2017). Chapter two, for example, highlighted a need exists for public-private stakeholder collaboration on risk management at an industry level within the aerial adventure industry. Effective stakeholder collaboration helps build networks among stakeholders, whilst also enabling stakeholders to access the resources required to achieve their objectives (Saito and Ruhanen, 2017). Much of the tourism stakeholder collaboration literature is centred on tourism destinations, in light of their interactions with stakeholders

from various sectors (Wang and Fesenmaier, 2007; Fyall et al., 2012; Beritelli, 2011). Indeed, a majority of the facets of tourism take place at the destination (Fyall et al., 2006; Leiper, 1979). As is the case with the tourism destination, the aerial adventure industry is also comprised of stakeholders from various sectors, such as engineering, manufacturing and construction. Brands, such as the equipment supplier Petzl, serve many adventure tourism visitor attractions, including the aerial adventure industry. Further, visitor attractions, such as aerial adventure parks, are considered key pull-factors and thus critical for the sustainability of tourism destinations, yet remain under-researched (Ram et al., 2016; Leask, 2016).

In light of this study taking an industry approach to the issue of stakeholder collaboration within the aerial adventure industry, the tourism destination management literature was considered particularly appropriate given the shared characteristics, such as the fragmented nature of the stakeholders, motivations, requirements and barriers to stakeholder collaboration (Wang and Fesenmaier, 2007). Wang and Fesenmaier's (2007) case study, for example, identified four preconditions to stakeholder collaboration within a destination: crisis, competition, organisation support and technological support. Crises seemed to bring stakeholders together in this case, with the acknowledgement that these situations were better handled in unity, thus a recognition of mutual dependency, an area also covered by Fyall et al. (2012). In the same sense, stakeholders were aware of the competition at an individual level, but were also able to see the bigger picture of competing with other destinations and thus chose to collaborate because of that. Similarly, Wang et al. (2013) found that stakeholders within a region were motivated to collaborate by the idea of increasing competitiveness through knowledge transfers and thus benefitting the region. These benefits would, in turn, help improve the individual organisation within the region. Whether such recognition of mutual dependency exists within the aerial adventure industry remains to be seen and will be explored in chapters five and six of this study, but it is seemingly a requisite for effective stakeholder collaboration to take place at such a large scale. This is known as social exchange theory (Beritelli, 2011) and will be further explored in this chapter.

Another theory explaining stakeholder collaboration, resource dependency theory, is also explored further in this chapter. Here, it is argued that stakeholders within a destination, or in this case an industry, hold specific resources desired by other stakeholders, thus

providing some stakeholders with a motivation to collaborate (Fyall et al., 2012; Beritelli, 2011). As is the case with the aerial adventure industry, tourism destinations also often lack control by any one group or individual (Jamal and Stronza, 2009). For example, within the aerial adventure industry, advocacy groups exist, such as the ACCT or ASTM, yet no single organisation controls the industry. Indeed, the literature on tourism destinations often also considers a wider outlook in the form of a region (Graci, 2013; Wang et al., 2013; Waayers et al., 2012), a similar characteristic to the industry outlook of this study. Graci (2013), for example, argued that stakeholder collaboration at a destination level provides a holistic approach to solving complex issues. Similarly, chapter two of this study, found that a holistic approach was required to solving the risk management issues currently existing within the aerial adventure industry, hence the appropriateness of ERM as the chosen risk management framework and the requirement of industry-wide stakeholder collaboration.

3.1.2 - Chapter Outline

In this chapter it will be argued that by combining the skills, knowledge and experiences of a number of stakeholders will eventually lead to innovation, competitive advantage and overall improvement. As such, this chapter will argue that through collaboration between stakeholders in the aerial adventure park industry, it is possible to achieve effective risk management. This chapter will focus on what is required for collaborations to be successful, and what may provide barriers to the overall success of the proposed safety committee. For example, various collaboration skills and leadership skills as well as accountability are discussed in detail to explain how collaborative processes work and what is required for them to be successful.

Some of the issues encountered include trust, power imbalances, commitment and inclusivity. This chapter will argue that getting these areas right will be vital for any safety committee to be successful. What becomes clear is that in order for the safety committee to be successful a great deal hinges on stakeholder management within the aerial adventure industry due to the knowledge possessed by the stakeholders. As a result stakeholder theory and management will be discussed in the latter part of this chapter. Here, the term “stakeholder” in general will be discussed as well as the identification of stakeholders. Some scholars argue that, particularly due to today’s technological capabilities, anyone could be considered a stakeholder. This issue then leads to another

issue: how to prioritise certain stakeholders over others. As will become clear, this is a key issue to this study overall, as tourism operators have a number of stakeholders, but for the safety committee to be successful, it may not be feasible for all of them to participate. This chapter will argue that industry-wide implementation of IERM, through collaboration, in the aerial adventure industry can lead to effective risk management procedures due to the knowledge held by the stakeholders. This chapter will, however, begin with a critical review of collaboration theory.

3.2 - Collaboration theory: the path to effective risk management

'The planning, development and operation of tourism should be cross-sectional and integrated, involving various government departments, public and private sector companies, community groups and experts, thus providing the widest possible safeguards for success'

Wahab and Pigram (1998: 283).

Due to the fragmented nature of the tourism industry in general, considerable levels of collaboration and coordination between the various stakeholders, such as operators, the state, builders and suppliers, are required (Bramwell, 2011; Hall, 2000; Mosedale, 2014; Wang and Fesenmaier, 2007; Beritelli, 2011; De Kadt, 1979; Moore, Newsome and Dowling, 2002; Waayers et al., 2012; Adu-Ampong, 2014). This is particularly true in the case of tourism planning (Waayers et al., 2012; Aas et al., 2005; Adu-Ampong, 2014; Hall, 1999), destination management and marketing (Wang and Fesenmaier, 2007; Fyall et al., 2012; Beritelli, 2011; Zach and Racherla; 2011; Czernek, 2013) and sustainability (Graci, 2013; Jamal and Stronza, 2009). In order for tourism development to be successful, the sharing of information between stakeholders is key (Adu-Ampong, 2014). Indeed, Gray (1985) described collaboration as a process of shared decision-making between key stakeholders of a problem domain regarding the future of the said problem domain. However, little academic research exists on collaboration between stakeholders for effective risk management in general and certainly not in adventure tourism. Indeed, the lack of a comprehensive risk management framework within the adventure tourism literature has been acknowledged (Cheng, 2017). Collaboration theory was introduced to tourism studies in Jamal and Getz seminal work (1995). Since, numerous studies have been published investigating both the theoretical and empirical aspects of stakeholder collaboration,

focussing on three areas: identifying and involving stakeholders (Aas et al., 2005; Vernon et al., 2005; Everett and Jamal, 2004; Graci, 2013; Roberts and Simpson, 1999), the maintenance of collaborations (Jamal and Stronza, 2009; Vernon et al., 2005) and the long-term implementation of the solutions (Graci, 2013; Jamal and Stronza, 2009).

Maintaining collaborative arrangements is another issue, where joint-decision making plays a key part in the long-term success of collaborations (Vernon et al., 2005; Jamal and Getz, 1995). The sharing of information and heterogeneity are two other key areas in maintaining collaborations (Gray, 1989; Jamal and Stronza, 2009; Jung, 2015). Jamal and Stronza (2009) also argue that changing and the development of roles within the collaborative arrangement will assist in the maintaining of the process. The final issue is that of long-term implementation of the solutions developed by the collaborative arrangement. Whilst this area has only received sparse attention, academically, it still plays a critical role in the success of the collaborative arrangement (Graci, 2013; Arnaboldi and Spiller, 2011; Jamal and Stronza, 2009; Jung et al., 2015). To ensure the solutions can last long-term unrealistic expectations should be avoided (Arnaboldi and Spiller, 2011). However, Jamal and Stronza (2009) also analysed two areas in regards to the difficulties surrounding long-term implementation of solutions developed, namely long-term structuring and outcomes of collaborations. Jung et al (2015) for example pointed out that in some circumstances formal structures of collaboration might be needed to ensure its long-term success.

Gray (1989: 5) defined collaboration as 'a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible'. In other words, collaboration brings organisations and individuals from both the public and private sectors together to achieve certain goals that may be unattainable on an individual basis (Graci, 2013; Gray and Wood, 1991; Purdy, 2012). However, several definitions of the meaning of *collaboration* exist resulting in no consensus on the exact meaning (Adu-Ampong, 2014; Fyall and Garrod, 2005). Despite this, it is generally understood that many of the issues facing society and industries today cannot be solved by single organisations, hence the need for collaboration (Gray, 1985; Mandell, 1999). Further, collaboration offers a flexible and dynamic process capable of change over time thereby allowing stakeholders to address complex issues (Jamal and Stronza, 2009). The tourism industry is particularly complex and dynamic, as stated previously, due to the linkages, various stakeholders with diverse and conflicting

opinions and the lack of control by a single organisation or individual (Jamal and Stronza, 2009). This is similar to the aerial adventure industry, where organisations like the ACCT or ASTM hold no power, for example, and are merely capable of offering advice and guidance. But, this type of environment clearly causes a complex management situation and Trist (1983) called for tourism organisations to move away from an intra-organisational focus to an inter-organisational domain in order to determine strategies that enables the maximisation of everyone's interests. Indeed, through collaboration it is possible to effectively create and implement policies by bringing together numerous stakeholders (Adu-Ampong, 2014). This can be achieved by assembling stakeholders from the public, private and civil sectors who may then address the problem domain (Ansell and Gash, 2008).

Jamal and Getz (1995; 188) described the problem domain as 'a situation where the problems are complex and require an inter-or-multi organisational response, since they are beyond the capability of any single individual or group to solve single-handedly'. This clearly supports the argument of this study, that collaboration is required to achieve effective risk management in the aerial adventure industry, given the previous chapter outlined the complicated process that is risk management. Gray (1989) identified four key characteristics required for success in the collaborative processes: the stakeholders must be independent, the process must be in its early stages and be of an encouraging nature, mutual agreement over decisions, and the direction of the task must be a collective responsibility of all involved. These characteristics enable the group to achieve a united vision (Graci, 2013). Gray (1989) further developed a framework for collaboration consisting of three stages: 1) problem setting. At this stage it is important that the stakeholders agree on what the problem is and that it is important enough to collaborate with others in order to find a solution (Graci, 2013). 2) Direction setting. This stage focusses on creating rules and agreements among the participants, whilst also exploring the various options available as well as the opinions of each stakeholder. This will, in turn, enable the group to reach agreement over a course of action supported by the group overall (Graci, 2013). 3) Implementation. This final stage, thus, involves implementing the chosen course of action in which support, structure and compliance are key (Graci, 2013; Jamal and Stronza, 2009). Jamal and Stronza (2009) argue that it is important to identify and involve key stakeholders in the early stages to ensure the eventual implementation stage has the full backing of all involved. Finally, collaboration enables stakeholders to share and

implement ideas and solutions (Graci, 2013). Therefore, in the case of this study, it is believed that collaboration will allow key stakeholders to develop effective risk management procedures at an industry-wide level through the transfer of knowledge and experience.

Researchers argue that collaboration between the public and private sectors can lead to the development of competitive advantage, prevent stakeholder conflicts and combine resources for cost-effectiveness, whilst also assist the individual organisations in overcoming resource deficiencies (Czernek, 2013; Wang and Fesenmaier, 2007; Wilkinson, 2008; Bramwell and Lane, 1999; Adu-Ampong, 2014; Saxena, 2005; d'Angella and Go, 2009). With the tourism industry, as well as the aerial adventure industry, being ferociously competitive collaboration provides an important strategy for tourism management in regards to leveraging limited resources and delivering individually meaningful tourist experiences (Zach and Racherla, 2011). It can also lead to organisation learning as the individual stakeholders contribute through their own knowledge, experience and attitudes and this can, in turn, lead to innovation and overall improvement (Wang and Fesenmaier, 2007; O'Flynn et al., 2008). Indeed, continuous learning is key to successful collaboration (Koppenjan, 2008; Chen, 2010). With the aerial adventure industry being particularly dynamic as a result of the constant changes it undergoes due to innovation in PPE, for example, mutual learning and sharing experiences will therefore play a key role in developing effective risk management within the industry. Again, this also links back to the importance of industry taking the lead in the collaboration, with the knowledge clearly residing within the industry.

Learning comes from fruitful emergent planning (Clarke and Fuller, 2010), active, networked governance (Lindencrona et al., 2009), and considering boundaries between collaborative groups as venues whereby the participating stakeholders can learn how to work together (Quick and Feldman, 2014). Thus, continuous learning enables the group to discover what the goals and indicators might and should be (Koppenjan, 2008). Further, it opens up the policy process to more ideas and suggestions and different ways of thinking, thus leading to innovative solutions, whilst it also allows the public stakeholder to sound out ideas and gather the thoughts of the participants before implementing the policy solutions (O'Flynn et al., 2008; Ulibarri, 2015; Goldsmith and Kettle, 2009). These arguments therefore support the argument of this study, that collaboration is necessary in

the aerial adventure industry for effective risk management. Evidently, it is very beneficial to have both public and private stakeholders engage in finding the best risk management solutions for the industry as they share these attributes pointed out by the authors. Further, chapter two of this study has already stressed the importance of knowledge transfers between stakeholders to ensure the effectiveness of IERM. The types of collaborations can vary from local, regional, national or international, for example, and may take place either within or across these spheres (Jamal and Stronza, 2009). Adu-Ampong (2014) further argue that existing good levels of collaboration between public agencies will help ensure that new collaborative alliances between the public and private sector succeed. According to Reid et al. (2008) certain conditions are required in order for collaboration to work in tourism destinations: decisions must be made with a focus on promoting the overall goals of collaboration and said decisions should be based on research supported by objective and predetermined criteria.

3.2.1 – The Importance of Trust in Collaborations

Ansell and Gash (2008) and Emerson et al. (2011) described the stages of the collaborative process as cyclical interactions. Whilst similar, these frameworks are different from each other. Ansell and Gash (2008) described the interactions consisting of face-to-face dialogue, trust building, commitment to the process, shared understanding and intermediate outcomes. In Emerson et al.'s (2011) work trust, understanding and commitment are combined under one interaction; shared motivation with a further element of internal legitimacy added. Key to building trust, shared understanding and commitment to the process is face-to-face dialogue (Lasker and Weiss, 2003; Warner, 2006; Schneider et al., 2003; Emerson et al., 2011; Koschmann et al., 2012; Romzek, 2012). Whilst it is not enough on its own, one can hardly imagine successful collaborative processes without face-to-face dialogues. Koschmann et al. (2012: 334), for example, argues that face-to-face conversations develop collaborations as “higher-order systems that are conceptually distinct from individual organisations”. Indeed, numerous scholars have portrayed trust as the essence of collaboration (Casimir et al., 2012; Huxham, 2003; Milward and Provan, 2006), despite the collaborations starting with different levels of trust (Emerson et al., 2012; Walker and Hills, 2012). According to Chen and Graddy (2010) it encompasses interpersonal behaviour, confidence in organisational competence and

anticipated performance as well as a unifying bond and the feeling of goodwill. Trust can and will be gained over time, however, as the stakeholders work together, get familiar with each other and through this assure each other that they are reliable (Fisher and Brown, 1989). In the case of the aerial adventure park industry, most stakeholders will be familiar with each other as a result of the collaborative efforts already taking place within the industry by organisations such as ACCT, ASTM and PRCA. As a result, it is likely some levels of trust are already present.

Further, the collaborative outcomes must be evaluated on a long-term basis with the participants solving differences through negotiations (Reid et al., 2008). It has also been argued that collaboration can improve the inter-organisational relationship between stakeholders, which in turn ensures that individual stakeholders and the community are able to solve planning issues within the problem domain (Jamal and Getz, 1999). Similarly, if there is no collaboration, development may in turn be hampered (Lovelock, 2001; Moscardo, 2011). Lovelock (2001) found that poor relations between two government departments in Canada made it particularly difficult to develop policies in the support of tourism development. However, collaboration has been criticised in tourism planning for not occurring in systematic and linear way (Hall, 2008). For example, progressing collaboration depends on numerous factors. One such factor is understanding the feeling of mutually beneficial interdependence among stakeholders, which in turn can lead to agreement on aims and objectives (Healey, 2006). This would further assist in the development of trust among the stakeholders, making successful collaboration more likely (Waayers et al., 2012). Indeed, poor inclusion of key stakeholders in the planning process poses a considerable challenge to successful collaboration (Araujo and Bramwell, 1999).

Additionally, scholars argue that some of the greatest impediments to the success of collaborative outcomes include lack of experience and training of public agency officials, political cultures favouring centralisation of authority, lack of interest from the stakeholders, lack of funds, competition, mistrust, suspicion, and lack of agreement on structures and processes (Ladkin and Bertramini, 2002; Wang et al., 2013). Issues such as lack funds, for example, or just a lack of resources in general, can provide a great challenge to the overall success of the proposed safety committee in the aerial adventure industry. Indeed, because of limited resources, some stakeholders may not participate in the first place or they may be excluded as a result of their circumstances (Fyall et al., 2001; Naipaul et al., 2009). Competition among the participating stakeholders may also hamper the development and subsequent success of the safety committee as it can lead to a reluctance

to collaborate due to issues such as trust (Wang et al., 2013; Naipaul et al., 2009; Sharfman et al., 1991). On an area such as risk management, one could argue that stakeholders should not consider each other competitors, but should be working towards a common goal: keeping staff and participants safe. There are plenty of other areas in which they can compete.

Trust among the participating stakeholders has a big impact on the eventual outcome of the collaborative process (Wang et al., 2013; Roberts and Simpson, 2000). Yet, it presents a considerable challenge to create if it does not already exist (Jamal and Getz, 1995). For example, Wong et al.'s (2010) study found that it took ten years in their particular case. As such, a considerable amount of time, attention and effort must be put into this area. Further, trust can be gained through the sharing of resources, evidencing expertise, good intentions, clear communication, transparency, goal alignment, reciprocity and delivering on agreements (Bryson et al., 2015; Cummings and Bromiley, 1996; O'Leary and Vij, 2012). These are all key to the success of the safety committee in the aerial adventure park industry as well. On the other hand, however, failing to deliver on some of these points or being too focussed on personal interests, rather than the group's as a whole, can erode trust (Chen, 2010). In the past, it has been noted that collaboration does not simply involve negotiation, but also trust building of the stakeholders (Murdock et al 2005; Vangen and Huxham, 2003). Indeed, trust building can be a time consuming task, but in the cases where a hostile prehistory is present trust building is key in the early stages (Murdock et al., 2005; Ansell and Gash, 2008). Koppenjan and Klijn (2004) argued that trust reduces transaction costs, improves investments and solidifies relations, whilst also encouraging learning, innovation and knowledge transfer. Through trust, stakeholders are able to understand and appreciate other peoples' interests, needs, values and constraints, for example (Thomson and Perry, 2006). To a certain extent, taking part in collaborative processes is a somewhat personal experience and as such it requires relationship-building among the stakeholders, which in turn leads to trust (Romzek et al., 2012). Emerson et al (2011) further argues that trust leads to mutual understanding, which further leads to legitimacy and commitment.

Yuksel et al. (2005), argue that centralising the planning authority may stifle collaborative efforts, which may thus result in a lack of trust within the group, particularly in regards to strategic planning (Adu-Ampong, 2014). Also, with inter-organisational collaborations often being political in nature, politics and governance can potentially stifle collaboration (Wang et al., 2013). For example, at the local and state level, varying degrees of emphasis on tourism is typically placed as well as different approaches to the development of tourism

(Wang et al., 2013). If the state was to demand it maintain control and power, it would very likely lead to a lack of interest in collaborating from the private sector (Wang et al., 2013). As a result, in the case of the aerial adventure industry, one could argue that overall control from the state would not be desirable for a successful collaborative outcome to be reached. Indeed, it may damage the collaborative alliance completely. Further, Timothy (1998) argued that the periodic changes of government policy and role as well as job responsibilities of organisations and individual stakeholders can lead to a lack of continuity, which is required to preserve the loop.

3.2.2 – The motivations behind collaborations: A resource dependency or social exchange?

Wang and Fesenmaier (2005) developed four constructs, essentially outlining the nature and dynamics of collaborative alliances. The constructs are; 1) the precondition construct portrays the economic, social and environmental conditions for the creation of an alliance; 2) the motivation construct seeks to describe the reasons behind organisations opting to participate in strategic alliances as a method to achieve their goals; 3) the stage construct depicts the dynamics of the collaborative activities; 4) the outcome construct subsequently explains the results of the collaborative activities. However, the creation and management of collaborative networks also comes with substantial challenges for the stakeholders (March and Wilkinson, 2009). For example, a network is not owned by any person, even if some have more power than others, but is instead developed by a number of stakeholders. Despite this, the advantages of collaborating within the tourism industry has been explored for over two decades (Boivin, 1987). Stakeholders potentially participating in a collaborative alliance exist in an environment consisting of many influences, including competitive, technological, task-related, political, socio-cultural and economic (Fyall and Garrod, 2004). These influences will in many scenarios, encourage collaboration among the stakeholders (Wang and Fesenmaier, 2007). Influences also exist that encourage stakeholders to collaborate during social concerns or when major issues emerge (Wang and Fesenmaier, 2007). Thus, clearly stakeholders may enter into collaborative alliances with a number of different motivations (Wang et al., 2013). For example, research has highlighted a number of motivations, which may lead to collaboration among stakeholders. These include:

- Crises that direct the attention of stakeholders towards a certain issue (Crotts and Wilson, 1995; Wang and Fesenmaier, 2007).
- Current collaborations that introduce potential participants to each other as well as the problems they may both be facing (Fyall and Garrod, 2004).
- It is generally required that one individual among the group exhibits visionary leadership skills to take charge of assembling and move the collaboration on (Fyall et al., 2003).
- Economic or technological advances resulting in organisations being unable to compete successfully on an individual basis (Wahab and Cooper, 2001; Wang and Fesenmaier, 2007).
- A third-party convener may provide the forum or develop the opportunity for collaboration (Hall, 1999; Wang and Fesenmaier, 2007).

Various other motivations or influences for wanting to participate in collaborative arrangements have been identified in the literature over the years. For example, stakeholders may seek to gain access to important external resources (Fyall et al., 2000; Pfeffer and Salancik, 1978). Resource dependency theory (RDT) therefore helps understand this motivation, with a focus on the use of resources to form collaborations (Jiang and Ritchie, 2017; Falk, 2017; Fyall et al., 2012; Pennington-Gray et al., 2014). Fyall et al. (2012) argue RDT implies that resources are limited and that organisations who possess these resources seek to influence others through these resources. On the other hand, those that do not possess said resources seek to collaborate with those that do, thus leading to stakeholder collaboration. As such, it is perhaps not surprising that resource sharing has been argued to be the foundation of stakeholder collaboration (Nyaga et al., 2010). Indeed, RDT posits that stakeholder collaboration offers an opportunity to achieve industry-wide improvement on risk management by consolidating such capabilities as assets and knowledge (Barney, 1991; Falk, 2017). Given most of the stakeholders within the aerial adventure industry are SMEs, many do not possess a broad access to the resources required, hence the need for collaborating with fellow stakeholders. Other motivations for stakeholder collaboration in tourism include swift technical changes in an industry (Bramwell and Lane, 1999), financial difficulties or to quickly enter a new market (Fyall and Garrod, 2004; Lei and Slocum, 1992; Wang and Fesenmaier, 2007).

Fyall and Garrod (2004) also argue that stakeholders may want to collaborate in order to reduce risks. Reducing, or managing, risk through collaboration is central to this study and thus Fyall and Garrod's work (2004) would appear to support this idea. However, with the complex nature of risk management having already been acknowledged within this study, social exchange theory (SET) also supports this motivation. Fyall et al (2012), for example, argue complex problem domains, in this case implementing industry-wide risk management, make stakeholder collaboration appealing. However, Coulson et al. (2014) argue that stakeholder collaboration takes place only when stakeholders believe social exchanges offer greater benefits than other options currently available, meaning that in this case stakeholder collaboration may be seen somewhat as a last resort. Nevertheless, SET posits that stakeholders collaborate largely to serve their own interests, with the understanding of mutual dependency and the requirement of reciprocity to achieve common goals (Fyall et al., 2012), thus being based on the premise that all relationships consist of give and take (Kaynak and Marandu, 2006). As such, based on this theory, if industry stakeholders believe the benefits from participating in these exchanges outweigh the costs, i.e. time, they are likely to participate (Lee, 2013). Further, different types of social exchanges; reciprocal and negotiated (Coulson et al., 2014). Reciprocal exchanges occur in a non-organised manner in which actors are unaware as to what extent others will reciprocate (Frémeaux and Michelson, 2011). On the other hand, negotiated exchanges take place in a more formal manner with both actors seeking clarity in regards to agreement on the terms of the exchange (Coulson et al., 2014). At this point it is worth pointing out Fyall et al. (2012) argued RDT and SET could provide the motivations simultaneously for collaborating, thus not requiring one or the other.

Through collaborative processes less powerful stakeholders are also able to be heard (Ulibarri, 2015). This point is critical in the aerial adventure industry, given the industry is mainly consists of SMEs, with a few larger organisations who may possess more resources than the SMEs. Essentially, the SMEs are given a voice through collaboration. Finally, as has become apparent so far in this chapter, stakeholders choose to participate in collaborative arrangements in order to reach a limited amount of goals, which are generally specified prior to participating. These goals are most likely to be reached when collaboration takes place within a formal structure, a likely scenario in the tourism industry due to its characteristics (Pearce, 1989; Wang and Fesenmaier, 2007). One of these characteristics, for example, is the fact that many tourist operations are small businesses (Fyall and Garrod,

2004; Zehrer and Hallmann, 2015; Buhalis and Cooper, 1998). Having said that, Bramwell and Rawding (1994) argued that tourism operators' main motivations for participating in collaborative arrangements can vary to a considerable extent, be it achieving economic, strategic or social objectives. Further, in tourism in general, tourism operators have had to adapt their product offerings to satisfy the needs of an increasingly sophisticated consumer in light of the rapid progress of both economic and technological changes (Wang and Fesenmaier, 2007). This is for example evidenced in the USA where ski resorts are adding aerial adventure parks in order to become a year-round operation, but also to keep up with changing customer demands (Hawks, 2015). However, stakeholders may also be motivated to participate in collaborations as a result of increased competitive pressures as organisations attempt to gain access to new assets, markets and technologies or spread the cost of innovation over numerous stakeholders (Fyall and Garrod, 2004; Wang and Fesenmaier, 2007).

3.2.3 – The frameworks behind collaboration theory

Various researchers have conceptualised the assessment of the stages within the collaborative process (Bramwell and Sharman, 1999; Timothy, 1998; Selin and Chavez, 1995; Mandell, 1999). Bramwell and Sharman's (1999) analytical framework considers whether collaborative arrangements encourage power imbalances or not between the participants. They subsequently introduced three categories to investigate how the collaborative process is functioning: scope of collaborative arrangements; intensity of collaborative arrangements and the level of agreement materialising (Bramwell and Sharman, 1999). Another framework is that proposed by Timothy (1998). A normative framework, it explores the various levels of collaboration, whilst also providing a normative model of participatory planning principles (Ladkin and Bertramini, 2002; Timothy, 1999). Selin and Chavez (1995) put forth a model loosely based on Gray's (1989) work as well as Jamal and Getz' (1995) work. According to Selin and Chavez (1995) tourism collaborations advance through five stages: antecedents, problem setting, direction setting, structuring and outcomes. Their argument is that collaborations occur due to an event that brings the stakeholders together. According to Graci (2013) such an event is often a crisis, perhaps due to an accident for example. Shared opinions among the participating stakeholders are essential in order for the collaborative process to last in the long term (d'Angella and Go, 2009) and as a result existing networks will naturally help shape relationships (Selin and

Chavez, 1995). Selin and Chavez (1995) further argue that leaders being strong-willed and eager generally provide the motivation to further develop the collaboration, through incentives and the vested interests among stakeholders also play key roles. Finally, Mandell (1999) provides a continuum that measures the development of collaborative efforts, such as varying degrees of partnerships, coordination and collaboration (Ladkin and Bertramini, 2002). Using this framework one is able to thoroughly understand the various relationships and interactions existing between the participating stakeholders, be they from the public and/or private organisations (Adu-Ampong, 2014). To begin with, these interactions exist as loose linkages, but as they progress through the stages, they eventually develop into a lasting collaborative structure consisting of a broad mission and joint strategically interdependent action (Ladkin and Bertramini, 2002; Hall, 1999). Mandell (1999) thus describes the continuum as:

- Linkages or interactive communication between two or more participants.
- Recurring collaboration or mutual adjustment of the policies and procedures of two or more participants to achieve an objective.
- Temporary task force activity between the participants in order to achieve set goals.
- Consistent collaboration between two or more participants through formal arrangements to take part in limited activities to achieve set goals.
- An alliance where interdependent and strategic measures are taken, though with goals being narrow in scope. All actions occur within the participant organisations themselves or involve the sequential or simultaneous activity of the participant.
- A collaborative structure where a broad mission and joint and strategically interdependent action takes place. These structural arrangements are capable of undertaking broad tasks that go beyond the simultaneous actions of independent participants.

It is key that stakeholders connect with other key people within the collaborative arrangement as this will enable the achievement of individual goals as well (Mandell, 1999). For example, with increasingly complex policy issues, individual stakeholders should communicate with other stakeholders in order to coordinate and solve these issues (Ruhanen, 2013). However, as Mandell (1999: 8) points out 'this one size fits all type of modelling does not take into consideration the myriad of factors and events that must be

understood before these concepts can be of much use in the real world'. Nevertheless, collaboration has the capability of fixing issues arising due to lack of understanding or common goals between the many stakeholders in an industry (Waayers et al., 2012), such as the aerial adventure industry. Evidently, the management of knowledge is therefore key to the overall success of collaboration within the aerial adventure industry.

3.3 – Knowledge Management: The Foundation of Collaboration

3.3.1 – Knowledge Transfers

The importance of knowledge is nothing new. Whilst somewhat extreme, Drucker's (1992: 38) notion that 'knowledge is the only meaningful resource today' does hold some truth to it. In the past, organisations strived to be competitive through traditional resources such as land, labour and capital (Tzortzaki and Mihiotis, 2012). However, the most meaningful resource today, though not the only one, is knowledge (Tzortzaki and Mihiotis, 2012), that in turn drives development, innovation and commercialisation (Ruhanen and Cooper, 2004). For an organisation to constantly improve in areas such as innovation and risk management it relies on its capacity to learn, increase its knowledge base as well as on the its employees to share their knowledge (Teece, 2007; Sax and Torp, 2015). As such, the aerial adventure industry relies on its ability to take advantage of its knowledge-based commodities to remain sustainable in the long-term (Ruhanen and Cooper, 2004). The knowledge in question is that of an organisation's suppliers, employees, customers etc. (Mahr et al., 2014), individuals that undoubtedly play an immeasurable role in an organisation's growth. Cooper (2006) described knowledge as a series of stocks – what is known, and flows – how it is transferred. Ruhanen (2008: 430) argued that 'the ability to create, disseminate and exploit knowledge assets is [...] one of the key success factors for both the public and private sectors', an argument put forth throughout this study in regards to stakeholder collaboration and risk management. As a result, and in-line with Tzortzaki and Mihiotis (2012) argument above, this study recognises knowledge as a key resource, particularly in regards to the management of risk.

Argote and Ingram (2000: 150) argued that it is this knowledge that 'provides a basis for competitive advantage in firms'. Whilst this study is not interested in the development of competitive advantages being developed by the individual aerial adventure park operators, competitive advantage comes from an organisation improving a specific area, and this

study argues for improvement in the area of risk management. Undoubtedly, whilst this study calls for industry-wide stakeholder collaboration on risk management, stakeholders will still be competing in other areas. As a result, the knowledge organisations hold can lead to improvement in areas such as risk management. To achieve this, organisations must possess the ability to learn, to transfer the knowledge subsequently developed and to act on it quickly (Gottfridsson, 2012). In regards to knowledge transfers and collaboration, Koschmann et al.'s (2012) framework argue that communication is key to the success of the collaborative process. They propose, and promote the use of, authoritative texts, which provide an inclination of what direction the process is headed in. Further, Koschmann et al (2012) argue that these texts should entice other resources, assist the stakeholders in performing collaborative actions and encourage agreement in general among the stakeholders. O'Leary and Vij (2012: 513) share this opinion arguing that 'information exchange, dialogue, sharing ideas, brainstorming, articulating and asserting views, negotiations, bargaining, deliberations, problem solving, conflict management and conflict resolution are important for collaborations'. They further point out that key to knowledge transfers is ensuring that the channels involve all participants, are clear and occur on a regular basis (O'Leary and Vij, 2012). This process can, in turn, lead to innovations in technologies and business operations (Tidd et al., 2005; Shaw and Williams, 2009; Hjalager, 2002), both of which are essential to improving risk management procedures in the aerial adventure industry.

Lai et al (2014) refer to this as a knowledge economy, an environment where information and knowledge exchanges occur within a collaborative arrangement, and reinforce the organisations' knowledge creation and innovation. Such a collaborative arrangement could take the shape of a safety committee as discussed in chapter 2 of this study. Davenport and Prusak (1998) defined knowledge as a mix of experiences, values, contextual information and expert insight creating a framework for the assessment and incorporation of new experiences and information. In the literature, emphasis has been placed on the importance of knowledge within organisations and how this knowledge may be transferred between various organisations (Shaw and Williams, 2009), which is essentially the foundation of collaboration. As such, if there is no knowledge, there is arguably no reason to collaborate. Knowledge transfer is thus particularly important to this study due to its role in IERM and collaboration. Whilst knowledge management is key to tourism in general, research in the area is limited (Shaw and Williams, 2009; Czernek, 2013). Exceptions can be

found in papers on types of knowledge (Cavusqil et al., 2003; Cooper, 2006), how knowledge is created (Gretzel and Fesenmaier 2002; Czernek, 2013), how knowledge can be transferred (Blackman et al., 2011; Buhalis, 1999; Carlisle et al., 2013; Weidenfeld et al., 2010), and the importance of knowledge transfer in regards to innovation (Shaw and Williams, 2009; Baggio and Cooper, 2010; Burnett et al., 2014).

According to Nonaka (1991) there are two different types of knowledge: explicit and tacit. The former refers to knowledge that is easily coded and transferred. It may be stored in documents, databases and other sources of information (Czernek, 2013). On the other hand, tacit knowledge is complex to formalise making it more difficult to interpret and transfer from one individual to another (Shaw and Williams, 2009). The two are linked with tacit knowledge being embedded within explicit knowledge (Shaw and Williams, 2009). Indeed, tacit knowledge is required to apply explicit knowledge effectively. Nonaka and Takeuchi (1995) for example argued that tacit knowledge needs to be made explicit. Tacit knowledge can be learned through collaborative experiences and provides the organisation with a key source of improvement (Shaw and Williams, 2009). It may include competencies, capabilities, routines, habits, personal beliefs, perspectives and innovation and is generally embedded in organisational structures and cultures (Argote and Ingram, 2000; Nonaka, 1991; Blackman et al., 2011; Sigala and Chalkiti, 2015). Cavusqil et al (2003) point out that tacit knowledge may exist at an individual level in terms of skills, but also collectively. The latter tends to exist among top management, though (Cavusqil et al., 2003). Tacit knowledge is, in many cases, gained over years of experience (Czernek, 2013) and is, in many cases, a reflection of the values and norms planted in structural relationships and reflected in the overall goals of an organisation or an industry (Zheng et al., 2010). For example, in the case of this study, the knowledge transferred should constitute a reflection of the goal of the industry, which is to improve risk management. Further, organisational culture will also affect the transfer of knowledge in regards to what should be shared and what should remain hidden (Zheng et al., 2010).

Tacit knowledge can be difficult to articulate, code and transfer and it may not be relevant in other situations as a result of it being developed from personal experience (Blackman et al., 2011; Shaw and Williams, 2009). Nevertheless, the transfer of tacit knowledge is essential to the advancement of tourism organisations. Grant (1996) posits the challenge lies in the effective organisation of knowledge workers as their knowledge is specialised

and thereafter integrating the tacit knowledge. It is estimated that 80-90% of general knowledge resources in the tourism industry is tacit knowledge (Scott et al., 2008). The transfer of knowledge may take place in a number of ways be it between or within organisations, between public and private organisations and between tourist operators and DMOs (Blackman et al., 2011; Shaw and Williams, 2009; Czernek, 2013). For inter-organisational collaboration to be effective, numerous stakeholders have to work together to combine the various fields of knowledge (Blackman et al., 2011) in order to create effective risk management procedures within the aerial adventure industry. Further, the literature has identified numerous channels within which the transfer of knowledge may take place, such as trade associations, networks, seminars and observations (Shaw and Williams, 2009; Hall and Williams, 2008). The ACCT is, for example, one organisation that facilitates the transfer of knowledge within the aerial adventure industry, as explained in section 2.1 of this study.

Many tourism organisations are reluctant to transfer tacit knowledge due to the competitive advantage it may provide (Czernek, 2013). This clearly presents the aerial adventure industry with an issue. Indeed, like the tourism industry, it has certain specific features that may influence knowledge transfer (Burnett et al., 2014). As is the case with collaboration and explained in section 3.1 of this chapter, trust between stakeholders also plays a key role in the process of knowledge transfer (Scott et al., 2008). The level of competition within the industry may lead to low levels of trust, which in turn will lead to low levels of knowledge transfer (Scott et al., 2008). Weidenfeld et al (2010) also argued that the physical distance between entities may also hamper the transfer of knowledge. The aerial adventure industry, for example, is nationwide and thus there may be thousands of miles between some operators. Further, the individual organisation may not even be aware of the tacit knowledge existing within it, due to the seasonal and low skilled nature of the industry, coupled with low wages, which results in high labour-turnover rates (Czernek, 2013). Such an environment hardly encourages knowledge transfer between low-level staff and management, nor does it incentivise staff to improve qualifications that may lead to acquiring new tacit knowledge (Riley et al., 2002; Burnett et al., 2014; Czernek, 2013). At this stage, it is important to point out that whilst this study is focussing on an industry and not an individual organisation per se, for knowledge management to be effective at a macro level, it must start at the very bottom of the individual organisation. For example, Turner and Toft (2006: 203) pointed out that 'lessons identified need to be

passed on effectively to those who need to know about them'. Cooper (2006) further stressed the importance of an open decentralised environment where individuals and organisations have the tools and skills to view knowledge as a resource to be shared and not hidden.

Enz et al.'s (2006) study focussing on the hospitality industry, an industry very similar to that of tourism, found that from an organisation's perspective the lower-level employees are considered easy to replace and thus little regards is paid to them, despite their work-related knowledge, an essential part of the hospitality industry, as well as tourism. However, keeping these employees and their knowledge is a key economic resource and a core element as those organisations who do invest in their front-line employees advance as a result (Shaw and Williams, 2009; Kundo and Vora, 2004). Shaw and Williams (2009) argue that tourism organisations should actively seek to employ knowledgeable employees, encourage them to apply their knowledge through incentives, and offer opportunities for them to transfer said knowledge. In other words, rather than paying little regard to these employees, they should be seen as an asset. Finally, the limited cooperation between scientists and practitioners also presents a challenge in regards to the transfer of knowledge in tourism (Czernek, 2013). For example, in this case it is argued that practitioners consider scientific knowledge unnecessarily complex, preferring quick solutions to problems (Ritchie and Ritchie, 2002; Czernek, 2013). Cooper (2006) points out that in other industries knowledge transfers flow in a smooth manner, due to the close relationship between the researcher and business. However, Ruhanen (2008) points out that by utilising the collective knowledge of a destination, or in this case an industry, combined with the knowledge created by scientists and governments the long-term sustainability and success of the industry can be achieved. Further, one could also argue that a combined approach between the public sector and the industry might work instead of one or the other as is Ruhanen's argument. Cooper (2006) also recommended an approach involving both public and private sectors.

Key to the success of knowledge transfer is knowledge absorption (Davenport and Prusak, 1998). For this new knowledge to be converted into improved organisational procedures, such as risk management, the knowledge must first be absorbed effectively by the organisation, which requires the ability to recognise and comprehend the importance of new knowledge and implement it to commercial ends (Cohen and Levinthal, 1990). Certain

factors encourage knowledge transfer and its subsequent absorption such as the types of knowledge, the source, the quality, its reliability, the channels of knowledge transfer, existing knowledge levels of the receiver, the organisation's or the industry's internal structure and culture, and leadership among others (Czernek, 2013; Scott et al., 2008). Leadership is essential to ensure an industry effectively taps into its knowledge source (Donate and Pablo, 2015). The wrong type of leadership may, for example, result in knowledge hoarding and competition, essentially, the opposite what it is meant to do (von Krogh, Nonaka, Rechsteiner, 2012). It is important that the leadership set the right conditions for the process of knowledge transfer (Nguyen and Mohamed, 2011) at a macro level, which then needs to be repeated at a micro level to, again, ensure the right conditions exist from the bottom of the individual organisation to the top of the aerial adventure industry. Teece (2009), for example, argues that it is up to the knowledge-oriented leader to give knowledge transfer a key role within the industry in order to discover opportunities to innovate. Donate and Pablo (2015) further suggest that leadership need to encourage the creation of channels and initiatives through which knowledge transfers may take place. These channels and initiatives will be further explored in the following section on knowledge management, whilst section 3.4.4 will further explore the importance of leadership in regards to collaboration overall.

According to the literature, part of the issue in knowledge transfer and absorption lies in the make-up of the tourism industry, which is heavily dominated by small and medium enterprises (SMEs) (Weidenfeld et al., 2010; Shaw and Williams, 2009; Cooper, 2006), as is also the case in the aerial adventure industry. Cooper (2006) for example, pointed out that SMEs are unlikely to absorb new knowledge unless it is considered useful in their day-to-day operations. However, this problem may be a result of the limited ability of SMEs to absorb knowledge in general due to a lack of resources and skills and thus they are required to be selective in what they take in or disregard (Hall and Williams, 2008). Nevertheless, a key benefit and attraction of KM, and collaboration for that matter, is pooling together of resources of numerous SMEs, giving larger economies of scale (Casanueva et al., 2013). With the industry primarily being made up of SMEs the result is a particularly fragmented industry which further complicates knowledge transfer (Baggio and Cooper, 2010; Ruhanen, 2008). Further, in regards to the structure of the industry, this relates to creating a system that encourages and enables the sharing and re-interpretation of knowledge (Blackman et al., 2011). Blackman et al (2011) further argue that for this to

happen, a “broker”, an individual or organisation, is required to take the role of an intermediary. Blackman et al (2011) also identified the role of the knowledge boundary spanner, an organisation that recognises a specific issue and as a result facilitates the transfer of knowledge recognising and understanding the knowledge of others. The boundary spanner does not necessarily hold the knowledge, but acts as a facilitator. As such, the knowledge boundary spanner in question is essentially, what this study previously has referred to as a safety committee. In the case of this study, an organisation such as the ACCT could fulfil this role for example.

3.3.2 – Knowledge Management

The process of ensuring the transfer and absorption of knowledge is effective is knowledge management (KM). As an academic discipline, it is fairly young and with reference to the tourism industry, it is a somewhat neglected area of research (Czernak, 2014; Ruhanen, 2008). Indeed, according to Cooper (2006) research on the importance of KM in tourism first appeared in Jafari’s (1990) work. A number of KM definitions exist within the literature. Chase (1997: 83) described KM as ‘the encouragement of people to share knowledge and ideas to create value-adding products and services’. As a discipline, it involves the assimilation of a number of disciplines such as computer and management science, human resource management and strategy (Blackman et al., 2011). McElroy (2003) however points out that the focus of KM today is mainly on the human factor.

‘Among the changes now taking place in the practice of knowledge management is a shift in thinking from strategies that stress dissemination and imitation to those that promote education and innovation’ (McElroy, 2000: 199).

McElroy’s (2000) statement is perhaps somewhat alarming given the issues surrounding labour already described in this section. As is the case with collaboration, KM is not just important on the individual organisational level, but particularly so at a macro level, with a focus on industry or a region, hence its popularity in the DMO literature (Blackman et al., 2011). KM fosters learning and creates a shared understanding enabling adaption and the implementation of change, whilst also raising collective awareness of potential risks (Schianetz et al., 2007). Sigala and Chalkiti (2015) further argue that KM leads to organisational changes in regards to behaviour and the development of new ideas,

processes, practices and policies. Quintas et al. (1997: 387) argued that KM is a process 'of managing knowledge of all kinds to meet existing and emerging needs, to identify and exploit existing and acquired knowledge assets and to develop new opportunities'. As such, KM provides the means for long-term sustainability with the process of identifying, recording and sharing lessons being key (Blackman et al., 2011). Blackman et al.'s (2011) study on crisis management within DMOs is incredibly useful to this study due to the similarities of crisis management and risk management. Further, Blackman and Ritchie's (2008) notion that KM activities with a focus on the development and transfer of knowledge are essential for crisis management to be successful. One could argue that the same holds true in risk management. Indeed, KM can lead to organisational effectiveness, as Argote and Ingram (2000: 156) argued: 'It is what the organisation comes to know that explains its performance'.

Ruhanen (2008) argues that it is up to the public sector or at the DMO level to develop KM strategies to ensure the industry remains sustainable long-term. Whilst this study is not focussed on DMOs, once again, an organisation like the ACCT could take the place of the DMO. Indeed, Cooper (2006) called for an approach to KM looking at the macro level instead of the individual organisation. Key to KM is the identification of who/what has important knowledge and what shape it takes (Blackman et al., 2011). Cooper (2006) argues that this process involves the identification of business processes as well as the profiling of individuals in order to identify the knowledge needed to achieve the goals of the organisation, knowledge already held and the gaps. According to Zheng et al (2010) there are three processes to KM: knowledge generation, sharing and utilisation. Despite their differences the two versions essentially achieve the same outcome. Knowledge generation refers to the knowledge acquired from outside the organisation or those created from within (Zheng et al., 2010). Finally, knowledge utilisation, also referred to knowledge implementation, refers to how the knowledge is used (Zheng et al., 2010). The dissemination of the knowledge transferred and the subsequent implementation of the changes resulting from this process requires structure to be effective and not just become empty talk.

3.4 – The Importance of Leadership in Delivering Results

Whilst there are several key managerial functions of collaboration, when it comes to the creation of collaborative structures and processes, and how they are sustained, the

discussion is about leadership (Morse, 2011). The skills required to successfully lead a collaborative process are different from the traditional hierarchical concept of leadership, yet leadership is key to the developing, maintaining and managing collaborations (Morse, 2011; Morse, 2010; Crosby and Bryson, 2005; O'Toole, 2015; O'Leary and Bingham, 2009; O'Leary and Vij, 2012; Jiang and Ritchie, 2017). Salamon (2002) for example argued that enablement skills are key. For the collaborative process to succeed, constant guidance [sponsors] from people who have formal authority and support [champions] from people using informal authority to encourage stakeholders to participate in their common work is required (Bryson et al., 2015). According to Weber and Khademian (2008: 340) a champion is a 'collaborative capacity builder... someone who either by legal authority, expertise valued in the network, reputation as an honest broker, or some combination of the three, has been accorded a lead role in the network's problem-solving exercises'. This could, for example, be the president of one of the standard writing organisations, such as the ACCT, a position that is elected and thus approved by the industry. Leadership links back to the previous section of this study on tension management, clearly a key skill required of any sponsor or champion of a collaborative process. For example, stakeholders representing the government have special authority as they effectively represent the public (McGuire and Agranoff, 2011). The stakeholder representing a non-profit organisation may possess some power through a connection to a certain constituency and the stakeholder representing industry may possess knowledge of a certain technology (Bryson et al., 2015). As a result, leaders encouraging inclusivity should work with power differences and discover how to reduce the effect of them as required (Bryson et al., 2015). However, if a collaboration is planned to last long term, strategies for managing transitions of the leadership positions are required due to both sponsors and champions being likely to move on to other caucuses or positions (Simo, 2009; Koliba et al., 2011).

Not surprisingly, collaboration is a common term used in the literatures on leadership (O'Leary and Bingham, 2009; Bingham and O'Leary, 2006). Indeed, the literature is flooded with descriptions of the collaborative competencies required (see for example Emerson and Smutko, 2011; Morse, 2010, Bryson et al., 2015). Scholars argue that leaders must be committed to the collaborative process, not be advocating for a specific solution, being impartial when it comes to the preferences of stakeholders as well as leading across boundaries (Emerson et al., 2011; Bryson et al., 2006; Stone et al., 2010). A good leader must possess a collaborative mind-set whilst also being able to portray the issues facing the industry to ensure that all the participating stakeholders are able to understand the

importance and relevancy of them (Cikaliuk, 2011; Page, 2010; Linden, 2010). Further, McGuire and Silvia (2009, 2010) and Silvia and McGuire (2010) found that leaders in collaborations tend to be more interested in the people-oriented behaviours, rather than task-oriented as compared to traditional leadership. It is very likely that without good leadership the collaborative process will not be successful as leadership is required to set the ground rules, building and maintaining trust and enable dialogue (Ansell and Gash, 2008). Effective leadership assembles stakeholders and embraces, empowers and involves all of them (Vangen and Huxham, 2003). As we found in section 3.2 of this chapter, for example, leadership is essential in KM procedures of a collaboration focussing on implementing industry-wide risk management procedures.

Many experts have argued that it is through integrative leadership that collaboration emerges (Ospina and Foldy, 2010; Morse and Stephens, 2012; Crosby and Bryson, 2010). For example, it has been argued that leadership allows for the various dimensions of collaboration to combine and create successful results in the absence of traditional power and control structures (Morse, 2010). Morse (2010) further discovered three elements of public integrative leadership: creating and maintaining boundary organisations, creating common purpose, and organising boundary experiences which in turn create boundary objects. The importance of possessing the skill of building relationship capital has also been noted (Morse, 2010). Having studied government, non-profit and inter-sector collaboration, Linden (2010) also identified personal characteristics which are key to collaborative leaders, namely:

1. Possess drive to reach the goal(s) through collaboration with a managed ego.
2. Considering other stakeholder's perspectives.
3. Targeting solutions that suits all parties in order to meet common interest.
4. Use pull rather than push measures to encourage stakeholder collaboration.
5. The ability to think strategically so that the project has a bigger purpose.

Carlson (2007) highlighted the skills required to be a successful leader in a collaborative process. Carlson (2007) found that the following competencies were required:

- The ability to control various types of collaborations such as different levels of consultation, cooperation and collaboration.

- Recognising whether the environment is suitable for collaboration.
- The ability to judge certain situations and to implement principles to situations.
- Develop the methods required to gather stakeholders prior to the process taking place.
- Developing a suitable environment or forum as well as ground rules as well as selecting and working with an impartial facilitator.
- Assisting all stakeholders in participating and communicating with their respective “home organisations”.
- Making sure all stakeholder participation is effective.
- Using tools for managing discussion and developing areas of agreement.
- Developing governance structures that will last long-term to ensure collaboration continues.

The praxis of collaboration, as developed by Innes and Booher (2010), further described the analytical and behavioural skills required, such as the ability to create the right conditions and creating real dialogue, described as the ‘praxis of process’ (Innes and Booher, 2010: 97). Their subject is the implementation of principles to ‘the context, players and problem’ (Innes and Booher, 2010: 97). The concept of praxis encourages a trial-and-error approach, where the process is therefore constantly adapting and changes as new lessons are learned (Innes and Booher, 2010). Some of the key jobs of the collaborative leadership include ‘coming to terms with ambiguity, dilemma, risk and loss of control, in building trust and productive relationships between partners and in finding ways of influencing people and organisations outside leaders’ direct authority’ (Sullivan et al., 2012: 56). Bearing in mind the skills required for the leader to be effective, one could therefore argue the role of the CRO is essential and acts as the glue in bringing and keeping the collaboration together.

Being key to stakeholder collaboration, not all types of leadership are suited. Lasker et al (2001) for example described the skills required to lead effectively: encouragement across the board and active participation, enable across the board influence and control, enable productive group dynamics and widen the range of the process. As a result, a collaborative process may contain more than one leader (Lasker and Weiss, 2003). Indeed, collaboration is to some extent an unnatural act, where leadership is needed for it to work (Linden, 2010). It has also been argued that the leader must believe that there is indeed a problem to solve, whilst also possessing relevant educational qualifications (Esteve et al., 2012; McGuire and Silva, 2010). The capability of managing power-resource-knowledge

imbalances is also important to the success of the collaborative process, which can be achieved through empowering and representing weaker stakeholders (Jiang and Ritchie, 2017). Indeed, through strong and effective leadership, the weaker stakeholders can be empowered by giving them a meaningful voice (Ansell and Gash, 2008; Lasker and Weiss, 2003). Further, Ansell and Gash (2008) argue that if incentives to participate are low, power and resources are unevenly distributed and stakeholders share a hostile prehistory, leadership is ever more key to the success of the overall success of the process. This would support Emerson et al.'s (2011) view that leadership is the first key driver of stakeholder collaboration. Reed (2008: 2421), for example, argues that the success of stakeholder collaboration is 'strongly dependent on the quality of the process that leads [the stakeholders]'. Not only is leadership critical for bringing all parties to the table, but also to steer the group through difficult stages, such as lack of trust due to previous history (Frame et al., 2004; Imperial, 2005; Ansell and Gash, 2008). However, such functions of leadership can also upset other stakeholders. For example, attempts to empower weaker stakeholders could lead to lack of trust in the leadership (Warner, 2006). As a result, if conflict is high, an outsider, someone with no stakes, may be selected to mediate the situation (Ansell and Gash, 2008).

3.4.1 - The Ideal Collaborator

Whilst leadership is key to develop and sustain collaboration, it is not sufficient to have sponsors and champions, as other stakeholders are also required to use leadership at the level of the collaboration (Agranoff, 2012; Clarke and Fuller, 2010). Their role is to ensure the overall goals of the process are not forgotten and further encourage collaborative processes as well as inclusive structures (Bryson et al., 2015). Further, Huxham and Vangen (2005) argue that these minor leaders may also turn to "collaborative thuggery" in some instances to ensure inertia does not occur. As is becoming clear, it is the people behind the collaboration who are key, yet plenty of literature on collaboration has focussed on organisations, with little attention given to the role of the individual in collaborations (O'Leary et al., 2012). Frederickson (2007), however, argued that despite public and private agencies collaborating it is in the form of people. 'Effective collaboration is deeply dependent upon the skills of officials and managers (Frederickson, 2007: 16). As such, it matters what individual is chosen to represent their organisation and if they have the required skills to collaborate. Indeed, O'Leary et al (2012), in a study interviewing members of the US Senior Executive Service on what is required to be a good collaborator, found that

the most important skills were personal characteristics, such as being open minded and patient, and interpersonal skills such as communication and listening. Further, Emerson and Smutco (2011) devised a framework consisting of five collaborative abilities which were accompanied by ten specific skill sets, which combined create collaborative competence. This was developed by a working group of the University Network for Collaborative Governance (UNCG) through the analyses of various sources of competencies for leadership and collaboration (Emerson and Smutko, 2011). The UNCG studied sources like the Cooperative Extension System and the Centre for Innovative and Entrepreneurial Leadership (Emerson and Smutko, 2011). Morse and Stephens (2012) argue that this framework is extremely useful as it draws from various sources such as cooperative extensions, federal agencies as well as thought leaders in the field of civic engagement. Further, the UNCG consists of scholars and professionals who also have diverse backgrounds (Morse and Stephens, 2012). Essentially, the group contains a vast amount of experience, which assisted in the development of a well-balanced framework. The abilities were (a) leadership and management competency; (b) process competency; (c) analytic competency; (d) knowledge management competency; and professional accountability competency. Some of the skills accompanied included:

- Analytic and strategic thinking in and for collaborations.
- Negotiating agreements and managing conflict.
- Working in teams and group facilitation.
- Evaluating and adapting processes.
- Personal integrity and professional ethics (Morse and Stephens, 2012).

Koliba et al (2010) detailed a list of competencies necessary and similar to the previously mentioned discussions on collaborative competencies, namely: oversight, mandating, deliver resources, negotiation and bargaining, facilitation, cooperating governance, brokering, boundary spanning and systems thinking. Scholars argue that the latter, systems thinking, is key (Morse and Stephens, 2012; Luke, 1998). Luke (1998: 222), for example, argues that systems thinking involves considering the impacts on future generations, realising the domino effect and consequences of actions taken and finally 'thinking in terms of issues and strategies that cross functions, specialties and professional disciplines'. Finally, Getha-Taylor (2008) argue that the abilities required to be an effective collaborator

include; the ability to appreciate other stakeholder's views, show empathy, backs benevolent behaviour, behave towards the other members in an equal manner regardless of rank, shares resources, pursues win-win solutions. The full list of competencies can be found in *Identifying Collaborative Competencies* (Getha-Taylor, 2008). Similarly, however, Williams (2002) argued that the key skills of a good collaborator are communicating, listening, understanding, influencing, negotiating, creating trust and networking, resolving conflict, managing complexity and interdependencies and finally managing roles, accountabilities and motivations. Williams (2002) also points out the personality traits required, such as being honest, respectful, reliable and approachable. Evidently, to be successful at collaboration one has to be able to function in a team and leave behind the ego. One could point out the paradox this creates, however, as the stakeholders are, at the end of the day, representing their own organisations. If a collaborative method was to be used in the aerial adventure industry, for example, stakeholders representing the operators are ultimately responsible for that part of the industry. Thus, there obviously has to be a balance to a certain extent. Nevertheless, this study has illustrated many of the various collaborative competency frameworks, which all indicate similar themes. What has become clear in this study, however, is the importance of stakeholder participation and management in collaborations.

3.5 – Managing the stakeholders

The thoughts behind stakeholder theory originate from the business management and public administration literatures (Byrd and Gustke, 2011), such as organisation theory (Donaldson and Preston, 1995; Rowley, 1997), strategic management (Clarkson, 1995; Freeman, 1984) and business ethics (Phillips and Reichart, 2000). For example, the business management literature argues that stakeholders play a key part in defining both the organisation as well as issues that it may face and as a result, their interests ought to be a part of the process (Freeman, 1984; Donaldson and Preston, 1995; Byrd and Gustke, 2011). Through the element of social responsibility stakeholder theory was able to blend into social issues in management (Laplume et al., 2008). To a certain extent, corporate social responsibility (CSR) gives stakeholders the ability to influence organisations (Byrd and Gustke, 2011) to the point where it has become a key part of the sustainable development debate (Steurer et al., 2005; Gavare and Johansson, 2010). However, the stakeholder concept is not a new thought. Mainardes et al. (2011) for example trace it as far back The Theory of Moral Sentiments (Smith, 1759). Scholars further argue that today's usage in

management literature was developed and introduced by the Stanford Research Institute in an attempt to generalise and further the idea of shareholders as the only interest group the organisation should be concerned about (Jongbloed et al., 2008; Parmar et al., 2010). Today, the stakeholder perspective is used in numerous disciplines, such as public administration, health care, law and ethics (Freeman, 2010), though Garrod et al (2012) argue it has mainly been used in a business context. Despite the early beginnings of the concept, Freeman has been labelled the father of stakeholder theory (Laplume et al., 2008) due to his book *Strategic Management: A Stakeholder Approach* (1984). Since, stakeholder theory has become one of the most popular frameworks in the academic community (Egels-Zanden and Sandberg, 2010), with further key works developed by Clarkson (1994, 1995), Donaldson and Preston (1995), Rowley (1997), Frooman (1999) and Buchholz and Rosenthal (2005).

In his work, Freeman (1984) explained the relationship between an organisation and the external environment as well as its behaviour within this environment. As such, there are many different types of stakeholders, such as employees, shareholders, customers and suppliers (Branco et al., 2007; Schilling, 2000; Wreder et al., 2009; Freeman, 1984). In tourism research, Waligo et al (2013) identified six broad categories of stakeholders, namely: tourists, industry, local community, government, special interest groups and educational institutions. On the other hand, Garrod et al (2012) used a different set of categories: investors, customers, employees, suppliers and the local residents. Definitions of stakeholders vary from narrow views where stakeholders are considered actors of organisations, to broad views including almost any actor (Zehrer and Hallmann, 2015). Freeman (1984: 46) described them as 'any group or individual who can affect or is affected by the achievement of the organisation's objectives'. This definition of the stakeholder is arguably the most widely used today (de Bussy and Kelly, 2010). As such, the stakeholder concept argues that an organisation sits in the middle of a network of relationships that it has with numerous parties (Waligo et al., 2013). The aim of Freeman's (1984) work was to propose a sensible and realistic approach to strategy, with the belief that by listening to its stakeholders an organisation would achieve greater performance (Laplume et al., 2008), but also with the assertion that organisations are not self-sufficient, but rather dependent on the external environment (Mainardes et al., 2011). Essentially, it would provide the organisation with a competitive advantage. Further, scholars argue that organisations who listen to their stakeholders, be more efficient than those that do not (Zehrer and Hallmann,

2015; Agle et al., 1999). Similarly, in regards to the issue of this study, risk management procedures will be more efficient and effective by listening to the industry stakeholders.

Indeed, from the stakeholder view, an organisation consists of a relationship between groups that have an interest in the actions and activities of the business (Walsh, 2005). Likewise, industry stakeholders have an interest in the actions and activities of the industry. Thus, it concerns how employees, suppliers, communities etc. interact with each other to create value (Parmar et al., 2010). The importance of connecting with stakeholders has undeniably been acknowledged in the tourism literature, particularly since Murphy's *Community Approach* (Murphy, 2013; Waligo et al., 2013). Indeed, stakeholder collaboration is considered essential for tourism planning and development (Waligo et al., 2013; Hall, 2007). Evidently, with a focus on planning and development, stakeholder collaboration is therefore key to industry-wide implementation of IERM in the aerial adventure industry as well. What becomes clear is that in order to understand and appreciate how a business or industry works, one must understand this relationship (Freeman, 1984). Indeed, someone needs to ensure the relationship is managed and creating value for stakeholders as well as managing the distribution of this value (Freeman, 1984; Dodds, 2007). The "value" that Freeman (1984) speaks of also relates to the improvement in performance of areas such as risk management. This will in turn ensure the long-term sustainability of an organisation or industry, but also clearly concerns the values, choice and potential harms or benefits of many groups and individuals (Phillips, 2003). Yet, in tourism, involving stakeholders effectively is a challenging and sometimes underestimated task (Friedman and Miles, 2006). Stakeholder collaboration is a complex task due to the numerous and diverse stakeholders participating (Ladkin and Bertramini, 2002). In the aerial adventure industry, for example, the management of its stakeholders is key as mismanagement could cause not only physical harm to the people participating by neglecting the knowledge possessed by the stakeholders, but also end up harming the industry overall by disregarding these stakeholders. Further, this study has already described how an accident at a park can damage an entire destination. Evidently, stakeholder management, and the management of the knowledge they have, becomes essential for stakeholder collaboration to be effective within the aerial adventure industry. This will in turn enable the safety committee to meet its objectives.

According to Branco et al (2007) the premise of stakeholder theory is that organisations have a responsibility to not simply focus on the profits, but the considerations of all parties

involved, i.e. the stakeholders. For example, Werhane and Freeman (1999: 8) argue that ‘the goal of any company is, or should be, the flourishing of the company and all its principle stakeholders’. Stakeholder theory postulates that to ensure an industry or organisation remains healthy, a balancing act of the numerous claims of all stakeholders is necessary (Evan and Freeman, 1988; Moriarty, 2014). For example, Garrod et al (2012) argue that for an organisation to successfully meet its objectives, it must be able to focus on the wishes and demands of stakeholders, whom all have different interests. Similarly, for the safety committee to meet its objectives a focus on the wishes and demands of stakeholders within the aerial adventure industry must also be present. Essentially, that is how stakeholder theory opposes shareholder theory, as the focus is on everyone and not one single group of stakeholders (Phillips, 1997; Orts and Strudler, 2002; Moriarty, 2014). Shareholder theory only considers other stakeholders initially, whereas stakeholder theory considers them as ends (Moriarty, 2014; Garrod et al., 2012). Further, Moriarty (2014) contrasts the two theories by pointing out that shareholder theory focusses on the maximisation of shareholder value, when stakeholder theory instead attempts to balance all stakeholders’ interests. The argument behind shareholder theory therefore posits that attention should focus purely on the shareholders’ interests as this, in turn, would lead to the maximisation of financial returns (Garrod et al., 2012). As such, aiding the interests of the wider stakeholders is only done on a material basis, or a means to an end approach, with the understanding that shareholder value will increase as a result (Jensen, 2002; Garrod et al., 2012). Of course, one could argue that by balancing stakeholders’ interests, the shareholder value will also increase, as the balancing act would lead to overall industry health. Indeed, Garrod et al (2012) supports this argument, pointing out that the organisation must base its decisions in regards to the interest and opinions of all of its stakeholder groups.

3.5.2 – Stakeholder Legitimacy and Power

The issue over stakeholder power has been noted in the collaboration literature (Gray, 1989; Tett et al., 2003; Warner, 2006; Purdy, 2012; Bryson et al., 2015; Bryson, 2006). Power concerns the challenges stakeholders face in participating as a result power being unequally distributed within the collaboration (Arnaboldi and Spiller, 2011). Stakeholders may, for example, form powerful coalitions within collaborations, meaning participants who are outside these coalitions become less powerful as a result (Judge et al., 1995). Essentially, however, power imbalances can impair the less powerful stakeholders’ trust

and their ability to share thoughts and experiences in a clear and powerful manner (Vangen and Huxham, 2003). Some stakeholders are bound to be less powerful with regards to resources, influence and legitimacy resulting in them being co-opted by a more powerful stakeholder or even left out of the collaborative process altogether (O'Toole and Meier, 2004; Bryson et al., 2015). For example, some stakeholders simply do not have the time, energy, financial resources or people to participate in time-intensive meetings (Ansell and Gash, 2008; Wondolleck and Yaffee, 2003; Purdy, 2012). This is particularly an issue for SMEs, as was explored in section 3.2 of this chapter.

Bryson et al (2006) discovered two main areas of concern over power, namely: assembling stakeholders and controlling the power imbalances of the collaborative process. For example, it is imperative that adequate power is present to assemble the stakeholders, but with the government commonly acting as both the assembler and the stakeholder/participant, Broome (2002) questions its ability to do both effectively. Indeed it may not be beneficial for the government to act as the assembler, if trust issues exist between government and industry and as such it may be more suitable for an organisation like the ACCT to act as the assembler. Further, where the government requires hierarchical stakeholder collaboration structures, in which one person is left in charge and thus more powerful than others, this can lead to the aforementioned issues of inclusivity as other stakeholders may be ignored (Dienhart and Ludescher, 2010). With regards to the CRO, for example, though that person is in charge it would not be beneficial for the overall process if it was to be in an authoritarian manner, as explored in section 3.4.4 of this chapter. After all, this is a collaborative process. Thus, a democratic leadership approach may be more suitable, such as the aforementioned participative leadership style mentioned in Chapter two of this study. Hardy and Phillips (1998) used three sources of power to understand the dynamics between stakeholders in a collaborative process: authority, resources and discursive legitimacy. Authority is the accepted right, or power, to make decisions or take action (Greenwald, 2007). More often than not it is of course the government that has the final authority, particular with the government agent acting as the assembler (Purdy, 2012).

Identifying and involving key stakeholders early on in the collaborative process was discussed in the 1980s by Gray (1985). Further, the selection of said key stakeholders relates to legitimacy and power, two characteristics playing key parts in the collaborative process (Arnaboldi and Spiller, 2011; Jamal and Getz, 1995). Stakeholder legitimacy

concerns the stakeholder's right and ability to take part in collaborations (Arnaboldi and Spiller, 2011). In other words, in order for a stakeholder to be considered a *legitimate stakeholder* the individual must have the resources as well as the skills required to take part (Jamal and Getz, 1995). Resource power is a different kind of power to authority and can increase an organisation's influence in the collaborative process as a result (Purdy, 2012). This could very well be an issue in the aerial adventure industry with many operators being small operations and others being big operations, such as ski resorts. A David and Goliath situation in the collaborative arrangement is unlikely to be beneficial to the eventual outcome. Therefore, key to the success of collaborative processes is the empowerment of weaker or underrepresented participants (Lasker and Weiss, 2003; Ansell and Gash, 2008). Otherwise, such conditions will make the collaborative process vulnerable to manipulation by the stronger stakeholders and in turn leads to distrust and weak commitment (Ansell and Gash, 2008; Gray, 1989; Warner, 2006). As a result, McCloskey (1999) argues that environmental groups in the US are wary of collaborative processes as they see it as advantageous to industry groups. On the other hand, Weir et al (2009) found that handing more power to the stakeholder representing government may help alleviate these issues. Power conflicts have been argued to be more likely to occur during the early stages of collaborations rather than later on. For example, Ingold and Fischer (2014) points out that the participating stakeholders' opinions and power appear less important in creating collaborative ties during operating as compared to during early stages.

Discursive legitimacy is about the stakeholder's ability to represent a certain agenda (Hardy and Phillips, 1998). For example, stakeholders exercise discursive legitimacy when they respond to the values and norms of society, such as laws or principles like democracy (Purdy, 2012). Further, some stakeholders, representing organisations committed to societally important ideals, have power because of how we in society consider them compared to others (Huxham and Vangen, 2005). What is becoming clear is that power plays a key role in the success of collaborative processes. In collaborative processes, power is often accommodating, understood in the sense that the stakeholder of power commits to enact the group's recommendation instead of simply accepting it as advice (Purdy, 2012). In other words, it is vital that the CRO commits to the ideas of the group and does not substitute them with his/her own. Nevertheless, authority is needed for the process to succeed, as the issue that brought the participants together is unlikely to be resolved without it (Purdy, 2012), hence the need for a CRO. Indeed, one could argue that authority

is the one item currently missing in the aerial adventure industry, with risk management procedures in many cases not being enforced hence the need for stakeholder collaboration. Power imbalances are considerable issues in cases where important stakeholders do not have the capabilities to be represented in the collaborative process, for example due to organisational infrastructure (Ansell and Gash, 2008). For example, it has been argued that problems arise when stakeholders do not have the required skill or expertise to participate in discussions regarding technical issues (Murdock et al., 2005; Warner, 2006; Lasker and Weiss, 2003). This could be a major issue in the aerial adventure industry as any discussion on risk management procedures is likely to contain highly technical discussions. In this case an unprepared government agent might not understand or keep up with the conversation, which would be a considerable problem for the overall success of the process. Therefore, it would also be beneficial for the CRO to possess industry experience.

3.5.3 – Motivating Stakeholder Participation

As has already been discussed, key to the success of the collaborative process is possessing the power to bring stakeholders to the table. However, participating is generally on a voluntary basis, despite the process being mandated, and thus acknowledging the incentives that stakeholders have to engage in collaborative and the circumstances that affect those incentives is important (Ansell and Gash, 2008; Emerson et al., 2011; Romzek et al., 2012). This is, for example, the case in the US aerial adventure park industry, as has been pointed out previously. In many states it is not compulsory for the operators to follow any standards. Gunton and Day (2003) argue that power and resource imbalances can have an effect on the incentives of groups to participate in collaborative processes. For example, power imbalances can deter stakeholders from participating or they may otherwise prefer a congressional hearing (Gray, 1989). Of course, a congressional hearing is not always possible. As a result, Gray (1989) argues that timing considerations are vital as stakeholders whose power is increasing are unlikely to want to take part in collaborative processes. Another incentive critical in bringing stakeholders to the table is the likelihood of meaningful results as well as the balance of how much time and effort will be spent on it (Schneider, 2003; Warner, 2006; Ansell and Gash, 2008). Thus, if stakeholders in the aerial adventure industry do not feel any meaningful progress on risk management will come out of the collaboration they are unlikely to participate. Again, this links back to the resource deficiencies among SMEs explored in section 3.2 of this chapter. SMEs have to be selective

on what they spend their time on and, regardless of its good intentions, if the safety committee is unlikely to achieve anything significantly, the stakeholders are likely to stay away.

Brown (2002) also points out that the incentives of participating increase when stakeholders realise the importance of their participation and that it can lead to results that matter. Thus in the case of the aerial adventure park industry, one could argue that one of the incentives for operators and builders to participate would be the across-board increase in participant/employee safety. This would lead to a decrease in legal fees, insurance costs and reputational damages that would follow as a result of an accident. Likewise, Futrell (2003) describes how stakeholders' incentives decrease if they believe their role is merely advisory. Further, if the participants believe they could achieve the results outside of the mandated process, incentives are also likely to be non-existent (Ansell and Gash, 2008). Another issue can arise if stakeholders have considerable contacts/influence in the courts, in which case they are more likely to pursue another venue (Ansell and Gash, 2008). Even if the stakeholders participate in the collaborative process, in the event they become dissatisfied with the process, they are likely to take their claims to a different venue (Khademian and Weber, 1997). On the other hand, if the collaborative process is the only option to find the solution, the incentive is likely to increase (Ansell and Gash, 2008).

Logsdon (1991) argues that the incentives will increase if stakeholders considers the overall success of the process dependant on cooperation from other stakeholders. Yaffee and Wondolleck (2003), further argue that hostile stakeholders who also depend on each other are more likely to end up collaborating successfully. In this case, the incentive is to stay a part of the process in the fear that you will otherwise lose out (Reilly, 2001). Essentially, stakeholders are given a voice by participating. Interdependence is also a recognised incentive for taking part in collaborative processes (Thomson and Perry, 2006). This is regarding situations when stakeholders realise they cannot achieve results on their own outside the process (Emerson et al., 2011), and realise they have a mutual dependency on each other. This is perhaps the case in the aerial adventure industry. The problem is not the parks that have state-of-the-art risk management procedures, but the parks that do not. Once again, despite organisations such as the ACCT and the ASTM providing safety standards, they are not legislated, hence risk management variations exist between the various organisations. As an accident at one park is likely to affect another park, in terms of insurance costs for example, operators are therefore not able to singlehandedly achieve

results on their own. A final example of incentives is that of the threat of regulation or court action (Bentrup, 2001; Brown, 2002). The incentive here is for the industry to find solutions with the government instead of the government doing it on its own. In many cases, one could imagine the industry would much prefer the option of taking part as it allows all stakeholders to influence the final outcome. Something like this might be a key incentive for many stakeholders in the aerial adventure industry to take part in the process rather than having the government forcing its own policies upon the industry. Operating and building standards already exist and were written by experts (see ACCT, 2016; ASTM International, 2013), but if a collaborative process was disregarded the government might simply develop its own standards. If, for example, a major accident occurred, the government might panic and decide the current standards available were not considered safe and therefore force its own version upon the industry.

Previous experience of hostility or collaboration is likely to have a great impact on the success of the collaborative process (Gray, 1989; Ansell and Gash, 2008; Bryson et al., 2014; Crosby et al., 2015). When combining the existing standards within the aerial adventure industry, this could pose a problem for example. Stakeholders supporting ACCT's standards, may for example be hostile to the stakeholders supporting PRCA's standards and vice versa. The stakeholders may also view each other as competitors and therefore be hostile towards each other. As mentioned previously, the mind-set of the individual stakeholder is key in this case. However, it is worth mentioning that in some cases policy deadlocks can lead to effective stakeholder collaboration (Futrell, 2003). Indeed, Ansell and Gash (2008) argue that big conflicts do not necessarily prevent collaboration as often the stakeholders will realise their own goals cannot be satisfied without collaborating despite the opposing stakeholders' interests being different. However, prehistory of animosity is nevertheless likely to cause low levels of trust, which results in low levels of commitment and attempting to manipulate. On the other hand, Ulibarri (2015) argues that existing hostility can be overcome through collaborative process. At the same time, past experience of successful collaboration can lead to just solutions for many years (Ansell and Gash, 2008). Given the aerial adventure industry is still relatively small in the US (Adventure Park Insider, 2015) many operators and builders are bound to know each other. Any past history here can hurt any attempts at regulating the industry. At the same time, it could be very beneficial that the industry is still only small for these same reasons. As the stakeholders know each other, solutions could be found quicker and the results could be greater.

However, in order to get these results leadership is, once again, critical (Emerson et al., 2011; Crosby and Bryson, 2010).

3.5.4 – Ensuring Stakeholders Commit to the Collaborative Process

According to Margerum (2002) stakeholder commitment is the most important ingredient in collaboration. Yaffee and Wondolleck (2003) further argue that weak commitment from various stakeholders can become a great concern with regards to the overall success of the process. Indeed, without commitment from all stakeholders it would be impossible to achieve effective risk management procedures within the aerial adventure park industry. Commitment allows the stakeholders to cross boundaries, which may have previously hindered progress, and thereby commit to the same direction (Emerson et al., 2011). Commitment is also linked to the reason for participating in the process in the first place. For example, stakeholders may choose to participate to ensure that their opinions are heard, to ensure their position has legitimacy or even due to legal reasons (Ansell and Gash, 2008). By committing to the process, the stakeholders commit to the belief that good faith bargaining for common gains offers the most successful route to the preferred policy outcomes (Burger et al., 2001). Essentially, by committing the participants commit to the belief that it is through collaboration the industry can achieve the most effective risk management. As a result, committing to the process may demand considerable changes to the mind-set of the stakeholders (Putnam, 2004). It is important for the individual stakeholder to realise that whilst the safety committee is focussed on the industry as a whole, improving risk management procedures will also benefit the individual organisation. On the other hand, commitment can also lead to uncomfortable positions for the stakeholders as the process may take unexpected turns (Saarikoski, 2000). This, of course, links back to the issue of trust. Again, by committing, the stakeholder also hopes that the other participants will respect and appreciate his/her opinions. As a result, Ansell and Gash (2008) argue that clear, fair and transparent procedures are key to the success of the collaborative process. On the other hand, less powerful stakeholders may lack in commitment due to fear of being exploited (Battisti, 2009). Further, committing to the process will eventually lead to taking ownership of the process (Gilliam et al., 2002). Thus, the state agency is no longer solely accountable for the actions, but the stakeholders involved in the process have taken ownership of the decision-making process (El Ansari, 2003).

Koschmann et al (2012) argue that by naming the collaboration, constructing an interesting story of the group's work and creating an authoritative text can further commit stakeholders and develop a collective group. With numerous stakeholders sharing ownership, and therefore responsibility and accountability, trust is again key and shared ownership may as a result lead to power imbalances (Ansell and Gash, 2008). Ansell and Gash (2008) further argue that where collaboration is "forced" due to legislation etc. real commitment from the stakeholders may be disguised to the fact it is forced upon them. Therefore, in the aerial adventure park industry, forcing the issue would not yield the kind of results expected nor desired. Further, the type of task at hand can also have an impact on stakeholder commitment as well as the structure and processes of an inter-organisational network (Provan and Kenis, 2008). For example, the issue of ensuring the long-term sustainability of the aerial adventure industry might ensure stakeholders commit. During the collaborative process, the stakeholders should also create a shared understanding of what the group can achieve together (Tett et al., 2003), which again links back to the aligned aims issue mentioned previously. In the literature, shared understanding has been described as "common mission" (Roussos and Fawcett et al., 2000), "common ground" (Wondolleck and Yaffee, 2000), "common purpose" (Bryson et al., 2015; Tett et al., 2003), "common aims" (Huxham, 2003), "common objectives" (Padilla and Daigle, 1998), "shared vision" (Manring and Pearsall, 2004), "shared ideology" (Waage, 2001), "clear goals" (Glasbergen and Driessen, 2005), "clear and strategic direction" (Margerum, 2002). In the case of this study, for example, the "common purpose" (Bryson et al., 2015) could be along the lines of improving risk management procedures. Bentrup (2001) further argues that shared understanding can also mean shared agreement on the answer to a problem.

3.5.5 – Identifying stakeholders

Various definitions of the stakeholder have been described in the literature (Friedman and Miles, 2006; Bryson, 2004; Bucholz and Rosenthal, 2005; Fassin, 2009; Mitchell et al., 1997; Clarkson, 1995; Donaldson and Preston, 1995), but according to Fassin (2009) agreement exists on the definition of the three key stakeholder groups, namely financiers, employees and customers. Further, Fassin (2009) points out that additional groups should be considered such as competitors, the government, the state, communities and civil society. However, Mainardes et al (2011) argue that given the broad definition of Freeman's (1984) stakeholder identification groups and individuals have almost unlimited connections,

meaning an actor could be a member of a number of stakeholder groups, both external and internal. An employee, for example, might also be a member of an environmental activist group, meaning the employee is both an internal stakeholder, being an employee, and an external (Wegner et al., 2010). As a result of the many issues surrounding the identification of stakeholders, scholars have argued that perhaps focus should not be on identifying stakeholder groups, but rather the interests of the groups (Connely, 2010; Mas-Verdu et al., 2010). Previously, Donaldson and Preston (1995) had also argued for a similar approach, but it has yet to gain traction. Subsequently scholars have attempted to clarify and categorize the stakeholders (Clarkson, 1995; Donaldson and Preston, 1995; Mitchell et al., 1997). Through the various classifications the goal was to organise the many stakeholders into groups and thus enabling organisations to prioritise certain groups over others (Mainardes et al., 2012). This process is described as the very beginning of stakeholder involvement (Byrd and Gustke, 2011; Aas et al., 2005).

The model of identifying and subsequently categorising stakeholders this study will focus on is Mitchell et al.'s (1997) theory of stakeholder identification and salience. They used Freeman's (1984) definition of the stakeholder, mentioned previously in this section, as the base for the model, because it is so broad ensuring no stakeholder or potential stakeholder is left out (Mitchell, 1997). Therefore, as argued previously, everyone is considered a stakeholder, but the objective of this particular model is to prioritise between them to ensure the organisation manages its stakeholders in the most effective manner. In other words, the argument here is that some stakeholder groups may lack *legitimacy* as they are unable to affect the ability of the organisation to meet its objectives (Garrod et al., 2012). Thus, this model perhaps goes a step further than the two previous models in that it not only identifies and categorises stakeholders, but does so in terms of their respective importance (Mitchell et al., 1997; Friedman and Mills, 2006). This links back to the issue of prioritising stakeholders mentioned previously in this section. Mitchell et al (1997) arguably found the answer by proposing a model incorporating three factors: power, urgency and legitimacy (Mainardes et al., 2012; de Bussy and Kelly, 2010). Indeed, scholars have found that outside of academia and in industry, senior managers do pay attention to stakeholders in accordance with their credibility regarding power, legitimacy and urgency (Aaltonen et al., 2008; Agle et al., 1999). The model contains stakeholder powers of negotiation, their relational legitimacy with the organisation and the urgency in regards to taking care of stakeholder requirements (Friedman and Miles, 2006). For example, whilst Freeman (1984)

did section stakeholder groups into primary and secondary roles with the primary groups being given priority, Mitchell et al (1997) referred to this concept as salience, a concept based on the degree of legitimacy, power and urgency. A stakeholder group may not possess any one of these characteristics and as a result, despite being considered a stakeholder, it would not receive any serious attention because of a lack in salience (Garrod et al., 2012). Essentially, power describes the extent of the stakeholder's power over the organisation to influence it. It may be coercive, normative or utilitarian, meaning power can both be gained and lost by stakeholders. Further, legitimate stakeholder groups will, to a certain extent, have some power with regards to the decision making process at an organisation (Gray and Hay, 1986). Scholars have since acknowledged that power is an attribute used to identify and prioritise stakeholders (Branco et al., 2007; Parent and Deephouse, 2007; Crane and Ruebottom, 2011; Jamal and Getz, 1995; Garrod et al., 2012). On the other hand, these stakeholder groups may not have the ability to exert their power as a result of lack of resources, skills and so forth (Garrod et al., 2012).

However, power on its own is not enough to be classified as high priority, with authority being required as well (Friedman and Mills, 2006). Legitimacy describes the legitimacy of the stakeholder's relationship with the organisation and goes hand-in-hand with power, as argued by Weber (1947), and thereby creating authority. As pointed out previously, however, stakeholder theorists do not agree on how to define legitimacy. Even if a stakeholder group considers itself legitimate, the organisation may not consider it to be the case, for example (Garrod et al., 2012). Friedman and Miles (2002) argues that this would depend on whether the organisation has enough freedom to discard the particular stakeholder group's interests. However, legitimacy can exist without power, but will instead need urgency to achieve salience with the organisation (Mitchell et al., 1997). Thus, key here is the stakeholder-organisation relationship. Salience has also been used as a means to analyse why organisations treat legitimate stakeholders in different manners (Sheehan and Ritchie, 2005). According to Sheehan and Ritchie (2005) organisations tend to keep closer and relevant relationships with the groups considered to have greater salience. Urgency regards the swift need for action with regards to the stakeholders' request (Mitchell et al., 1997; Mainardes et al., 2011). Mainardes et al (2011: 236) describe it as 'a dynamic model based on an identification typology enabling the explicit recognition of the uniqueness of situations [...] explaining how managers should prioritise relationships with stakeholders'. These three factors are characterised by three important features (de Bussy

and Kelly, 2010). They are inconsistent, socially constructed and determined by understanding instead of objective reality.

De Bussy and Kelly (2010) argue that stakeholders who have one or more of the three factors may not use them or even be aware of it. These features make the theory dynamic by creating an initial framework that determines how stakeholders can become important or lose their importance. By combining the three factors of power, legitimacy and urgency Mitchell et al (1997) created eight stakeholder classes. Those containing only one of the three factors [dormant stakeholder, demanding stakeholder, discretionary stakeholder] were deemed latent. This type of stakeholder struggles to be heard by the organisation (Wang et al., 2013). The classes containing two factors [dominant, dependent and dangerous stakeholders] were deemed expectant stakeholders. These stakeholder groups are the types that have very important interests, but little or no legitimacy (Garrod et al., 2012). They are still considered important to the organisation, however. Finally, the ones with all three factors are deemed definitive stakeholders and are very salient meaning they will get the most attention (Wang, 2015). The individuals or groups containing none were deemed non-stakeholders (Mitchell et al., 1997). However, stakeholders' attributes may change over time. Stakeholders may become more or less salient as the organisation moves through its life cycle (Jawahar and McLaughlin, 2001). In other words, as the environment, surrounding the organisation, changes so does the salience of its stakeholders. Different objectives, for example, will obviously result in different stakeholders being considered important. In the context of this study, a prominent stakeholder group, the consumer, was left out of the data gathering process, for example, with the objective of the study to understand stakeholder collaboration within the US aerial adventure industry. Whilst the study does recognise the legitimacy of the consumer, as a stakeholder, their lack of experience and expertise in the industry meant any involvement from this stakeholder would be inappropriate. Instead, the consumer was represented by another public stakeholder, the state, who did possess these criteria.

3.5.6 – Criticism of Stakeholder Theory

Despite being considered one of the most popular frameworks in the academic world (Egels-Zanden and Sandberg, 2010) the theory has perhaps been at a theoretical standstill since the rapid growth experienced in the 1980s and 1990s (Mainardes et al., 2011). This

study has already described some of the criticism over the identification of stakeholders. However, scholars have also pointed out that the theory fails to address the environment around an organisation (Mainardes et al., 2011; Key, 1999; Fassin, 2009; Wu, 2007; Luoma-aho and Vos, 2010). Critics argue that stakeholder theory assumes the environment is static, focussing on the company, containing only stakeholders (Luoma-aho and Vos, 2010; Key, 1999; Mainardes et al., 2011; Fassin, 2009). Luoma-aho and Vos (2010) however argue that the environment is anything but static and is instead marked by conflicts of interest. Society is changing constantly, for example, resulting in continuous changes to the field of forces in which organisations operate (Vos and Schoemaker, 2005). Indeed, stakeholder theory as put forth by Freeman does not provide any provision for understanding how to manage change (Mainardes et al., 2011). Further, whilst Freeman's (1984) aim was show how identifying actors would provide a significant strategic tool, a theoretical base to explain how an organisation or the individual actor behaves was lacking from his work (Mainardes et al., 2011). Key (1999) for example points out that the model fails to explain how organisations behave and does not provide another alternative other than reassess the organisation as an entity transforming resources influenced by and influencing internal as well as external actors. Key (1999) further argues that stakeholder theory fails to sufficiently describe the process, insufficiently incorporates external and internal variable and lacks focus on the system in which organisations operate as well as those levels of analysis within the system.

3.6 – Conclusion

Chapter two explored the importance of risk management and discovered a need for a comprehensive risk management framework within the aerial adventure industry as well as adventure tourism. The implementation of IERM on an industry-wide basis was recommended as was the creation of an industry safety committee made up of industry stakeholders and spear-headed by a Chief Risk Officer. The previous chapter further discovered that knowledge transfers are key to effective risk management, particularly in IERM, as it drives innovation and development both of which are key to effective risk management. As a result, chapter three focussed on how IERM might be implemented most effectively, namely through the use of stakeholder collaboration to take advantage of this knowledge. The safety committee would be able to do so by disseminating said knowledge to the entire industry. As such, this chapter has put forth stakeholder collaboration as the ideal option for achieving effective risk management in the aerial

adventure industry. To ensure that the outcome of the safety committee does not simply fall on deaf ears, this study has argued for a collaborative approach, involving public-private stakeholders and thereby enabling some form of government involvement to enforce the recommendations derived from the process. As has been argued, this is perhaps the key area missing within the industry, as in many cases, the standards are not enforced. Further, a collaborative approach will also provide the arrangement with some level of oversight to ensure that changes are made for the right reasons. It has been recognised that due to the task being incredibly complex, it is not sufficient for the government to do so single-handedly. Indeed, it may be that the government is merely the enforcer. Thus, the solutions put forth by the safety committee will not be devised by an individual who may never have been a participant on an aerial adventure park, but instead devised by professionals and experts who understand the industry and its activities thoroughly in collaboration with a state agent.

Evidently, stakeholder collaboration benefits from combining the knowledge, thoughts and experience of the industry stakeholders with the power that government inevitably possess to enforce the rules and regulations put forth by the safety committee. This, in turn, leads to improved effectiveness of risk management procedures within the aerial adventure industry, making it a safer experience. Further, as the procedures are developed through industry stakeholders collaborating, the eventual result is more likely to receive wide-spread approval. Nevertheless, collaboration is not a straight forward task, involving many hurdles. This chapter has for example outlined issues such as power imbalances that may arise due to some stakeholders being more powerful than others and a lack of trust among the stakeholders for a variety of reasons. In the aerial adventure industry, there may be a lack of trust towards the government in the fear that it may go too far with its rules and regulations, for example, but by being involved in this collaborative process one would expect the outcome to reflect the wishes of the industry. Trust may also be an issue among the stakeholders who may consider each other competitors. Evidently, implementing IERM on an industry-wide basis is a big challenge.

This chapter has also argued that stakeholder management is key for IERM to be implemented effectively on an industry-wide level due to the knowledge they hold. By transferring knowledge between the individual stakeholders and the safety committee, they are able to combine that knowledge and improve risk management collectively as a

result. As such, the focus of this study on an industry as a whole, rather than the individual organisation, is justified. By improving risk management collectively the entire industry improves, rather than a single organisation. This, in turn, strengthens the long-term sustainability of the industry. As was discussed in chapter two, an accident is bad for the entire industry and not just the single operator in question. The literature showed that industry collaboration, in general, is becoming more and more popular, but particularly so in tourism. Due to fragmentation and the number of SMEs in the aerial adventure industry, resources are limited and collaboration provides a remedy to overcome these deficiencies. By collaborating, SMEs should achieve greater economies of scale through the pooling of resources from the entire industry. However, this chapter also discussed the challenges of encouraging stakeholder participating and ensuring they are committed to the safety committee's objectives, a problematic area also due to the limited resources of the SMEs. Sufficient incentives have to be provided by the safety committee to ensure stakeholders participate.

This chapter has further argued that by bringing stakeholders together and agreeing upon certain aims and objectives risk management procedures can be improved. However, it requires all stakeholders to be actively engaged and having the correct attitude towards the purpose of collaboration to ensure that the outcome is reflection of the industry as a whole. Leadership is essential for such an arrangement to be successful. It would require one or more individuals, who believe in the purpose of the collaboration, with the capabilities of bringing together the various stakeholders ensuring that all participants are in a similar frame of mind by agreeing on and formalising the aims and objectives of the safety committee early on. A participative leadership style is required, guiding and enabling the committee, but ensuring the end product is the overall view of the industry, rather than a hand-full of people. Various challenges to collaboration therefore lie within the industry, such as trust and power imbalances. It is through leadership that concerns and lack of trust, that stakeholders may harbour for their fellow operators or builders, must be minimised to ensure the various voices in the industry are heard. Similarly, the mind-set of the participating stakeholders has to be appropriate. The transfer of knowledge and the eventual management of it is key to the success of the safety committee as it effectively provides the foundation of collaboration, but is also an essential part of IERM. As was discussed in this chapter, utilising the combined knowledge of various stakeholders can lead to innovations in technologies and business operations, which in turn may improve

risk management procedures. As such, it has become clear in this chapter, that risk management procedures become more effective through collaboration.

This chapter has further argued that accountability is key to collaboration. The subject of accountability is problematic in collaborations and it was pointed out that collaborations ought to be judged on whether they create public value as far as the stakeholders are concerned. This collaboration would do so by offering safer experiences for the participants and decreasing the legal fees for operators and builders, for example. This would be achieved via that of process oriented regulation where the focus is on collaboration between the public and private stakeholders over the creation of standards and voluntary sharing of information. By doing so, it enables the private stakeholders to take part in roles previously carried out by state agents, such as monitoring and oversight. As a result accountability is spread across the board of the entire collaborative. This, in turn, encourages commitment from all stakeholders, another important aspect of a successful collaboration. As has been pointed out, common understanding as well as shared aims among the stakeholders will help prevent barriers to the success of the collaboration from arising. Essentially, it is vital that the end goal of the collaboration is same among all stakeholders, even if they have different motivations for seeking them. The government might purely be focussed on participant safety, for example, whereas operators and builders will also bear the legal situation in mind. Nevertheless, they have a common interest for this collaboration to succeed.

By collaborating to achieve effective risk management, other benefits may also arise such as innovation. Product innovation might take place as a way of improving safety, for example. What becomes clear, however, is that the stakeholders participating in the safety committee are key to its success. Whilst this study does recognise all stakeholders, however, it is not the belief that all stakeholders should be involved in this particular process, but merely the key stakeholders. Using Mitchell et al.'s (1997) theory of stakeholder identification and salience, the key stakeholders are identified. In this case, that would be the regulators, builders, operators, insurance providers and third sector stakeholders such as the ACCT and/or PRCA. The regulator represents another key stakeholder: the customer. As was pointed out earlier in this chapter, it would be too complex to include every citizen who may have a vested interest in the aerial adventure park industry, hence the choice of three stakeholders taking part. Thus, whilst stakeholder identification may have been described as a major issue in stakeholder theory that will not be the case in this study. Finally, for IERM to be facilitated in the aerial adventure industry,

one of the existing standard writing organisations such as the ACCT could provide the safety committee. By combining collaboration and enterprise risk management, the arrangement in the aerial adventure industry could be referred to as a CIRM (Collaborative Industry Risk Management) Group, reflecting the focus on industry.

Thus, the literature review chapters found that perceived risk played a critical role in the attraction of adventure tourism visitor attractions such as aerial adventure parks, yet with that a need for effective risk management is critical. Indeed, somewhat surprisingly, in the broader context of this study, adventure tourism was also found to lack a comprehensive risk management framework, despite its association with risk being well-documented within the literature. As such, IERM is also the first risk management framework proposed for adventure tourism, as well as the aerial adventure industry. This chapter has further highlighted the importance of knowledge transfers to effective risk management and thus stakeholder collaboration becomes a critical aspect of effective risk management on a B2B and a B2G level. Yet, research has neglected the area of industry-wide stakeholder collaboration. Identifying the motivations and barriers of stakeholder collaboration within the aerial adventure industry thus becomes key and will be compared with the literature. However, this may also have wider implications for the literature on tourism destinations in regards to the resource dependency and social exchange theories, due to the numerous shared characteristics identified in this chapter. Tourist visitor attractions, including aerial adventure parks, were also acknowledged as being under-researched on a number of levels. Finally, the literature review chapters of this study also highlighted the aerial adventure industry has yet to be classified appropriately as an activity, which may have managerial implications for the industry. As such, numerous gaps in the literature have been identified in both literature review chapters in regards to industry-wide stakeholder collaboration on IERM in a tourism context, but more specifically in regards to the US aerial adventure industry. The following chapters will seek to address these gaps.

Chapter 4

4.0 – Research Methodology

4.1 – Introduction

This chapter will focus on the research design of the study, which enabled the researcher to answer the research questions. The purpose was to critically discuss the principles and methods used during the research process, namely: the research philosophy, the nature of research, the research strategy, ethical issues, limitations and data analysis.

4.2 – Research questions and research approach

With the research problem in mind, the aim of this study was to advance the knowledge and understanding of stakeholder collaboration theory and risk management, and thereby contributing to knowledge through the development of a collaborative risk management framework.

PhD objectives:

1. Investigate and ascertain the main challenges of risk management within the aerial adventure industry including maintaining the balance between perceived and actual risks, perception issues, demand and leadership.
2. Explore and establish the value of public, private and third sector stakeholders collaborating to achieve effective risk management focussing on trust issues, leadership, motivations benefits and barriers.
3. Establish the suitability of IERM in the aerial adventure industry by exploring current risk management practices as well as desires to improve on such within the industry.
4. Explore and establish the requirements and barriers for industry-wide collaboration within the aerial adventure industry, with a particular focus of the thoughts of management representing private as well as public stakeholders.

5. To propose a framework to enhance the management of risk on an industry-wide basis using a collaborative approach with a focus on knowledge transfers between industry stakeholders and a safety committee.

PhD Research Questions

1. What role does perceived risk play in achieving effective risk management?
2. How can ERM achieve effective risk management in the aerial adventure industry?
3. How can stakeholders within the aerial adventure industry collaborate to develop effective risk management procedures?
4. What role do knowledge transfers play in connecting stakeholder collaboration and IERM?
5. What role does leadership play in initiating and motivating industry-wide stakeholder collaboration?
6. What are the requirements for achieving industry-wide stakeholder collaboration within the aerial adventure industry?

4.3 – Interpretive Paradigm

A number of research paradigms exist and can be used when undertaking research. This is one of the first decisions a researcher makes when preparing to gather primary data and thus plays a role in the following decisions as well in regards to research strategy and the data gathering itself. Whilst it is not a case of one being right and the other wrong, one paradigm may reach a different outcome than the other (Saunders et al., 2012).

A paradigm is a set of beliefs that act as a guide in the actions we take (Jennings, 2001; Creswell, 2007; Guba, 1990). Thus, a paradigm provides the overall vision of how the world works, 'or all-encompassing ways of experiencing and thinking about the world' (Morgan, 2007: 50). As such, the paradigm guides the subsequent decisions researchers take when conducting research (Denscombe, 2007). In order for the researcher to choose a paradigm, three questions devised by Guba (1990: 18) based on ontology, epistemology and methodology were referred to:

- 1. Ontological: What is the nature of the "knowable"? Or what is the nature of "reality"?*
- 2. Epistemological: What is the nature of the relationship between the knower (the inquirer) and the known (or knowable)?*

3. Methodological: How should the inquirer go about finding out knowledge?

In simple terms, Jennings (2001) argued that the paradigm is the overall view of how the world works; the methodology provides the guidelines for conducting research within this world-view; and the methods are thus the specific tools the researcher used to gather and subsequently analyse the information.

The paradigms to consider for this research were: positivism, realism, interpretivism and pragmatism. In short, positivism is a paradigm similar to the ones used in physical and natural sciences, with considerably structured methods used to create replication and thereby resulting in law-like generalisations (Saunders et al., 2012). Here, the world is viewed as governed by laws, creating a stable and patterned closed system allowing for the prediction of behaviour and events (Jennings, 2001). As a result, a quantitative methodology is employed when opting for this paradigm (Jennings, 2001). Often times, the researcher will seek to test a hypothesis and the development of numeric measures of observation is critical (Creswell, 2003). Positivism, for example, does not allow for intuitive knowledge nor for different opinions. Indeed, positivism does not allow for deeper understandings of complex issues, a requisite in the case of this study, and tends to have a true/false approach to its analysis of findings (Saunders et al., 2012). With the positivist paradigm, the focus is, arguably, more on quantity, rather than quality, which would most likely be more appropriate during later research into the aerial adventure industry, but on more specific subjects such as incident data or to gauge the levels of collaboration currently taking place. Thus, in the opinion of the author, when initially trying to understand complex phenomena, such as risk management and stakeholder collaboration, positivism was not deemed an appropriate paradigm. In the case of this study, the objective is not to judge the opinions within the data, but to understand them. Similarly, realism also relates to scientific research. Saunders et al. (2012: 105) stated that realism is a research paradigm “which stresses that objects exist independently of our knowledge of their existence”. The argument of realism is that reality is independent of the mind. Interpretivism, on the other hand, relates to the study of social phenomena in their natural environment and trying to understand “what is going on” (Saunders et al., 2012: 106). The researcher uses open-ended questions to gain an understanding of the views of the participants (Creswell, 2003). Finally, pragmatism argues the research philosophy is in fact determined by the research questions and objectives and may involve aspects of one or all

of the above philosophies (Saunders et al., 2012). The paradigm of pragmatism argues that only concepts demanding action are valid, with the aim to reconcile facts and values, accurate and vigorous knowledge and different contextualised experiences (Saunders et al., 2012). As such, the researcher did momentarily consider this paradigm and it may very well have been appropriate even with the same research design in place, particularly considering the focus on practical outcomes of the author. However, pragmatists are guided by the research questions, and whilst this was also partly the case in this study, bearing in mind the interview guides were partly guided by the research questions, the main approach of the author, going into this research, was simply to understand ‘what is going on?’ within the US aerial adventure industry, in regards to its risk management procedures and stakeholder collaboration, and from there to draw conclusions.

As a result, this study took on the interpretive social sciences paradigm. Denzin and Lincoln (1994: 13-14) point out this paradigm takes on a ‘relativist ontology (there are multiple realities), a subjectivist epistemology (knower and subject create understandings) and a naturalistic (in the natural world) set of methodological procedures’. This can be put into context by answering the three questions put forth by Guba (1990), above. This study argues that:

- The reality, or understanding, of improving risk management through collaboration will be different from stakeholder to stakeholder. For example, the opinions of the regulator may differ substantially from the operator or builder. Further, understanding these different realities and getting an “insider perspective” was key to achieving the aim and objectives of this study.
- The research process was subjective leading to the development of knowledge by the researcher and the stakeholders participating as the researcher immerses him/herself the social setting (Hammond and Wellington, 2012; Jennings, 2001). As will be explained later in this chapter, key stakeholders from the industry, i.e. operators, builders and government officials participated in interviews where subjective views on risk management and collaboration were exchanged.
- Data was gathered using a qualitative methodology.

As such, the other research paradigms were deemed inappropriate for this study, particularly bearing in mind the researcher's desire to gain a deep understanding of the views of the key stakeholders within the industry.

4.4 – Qualitative Research method

As a result of the interpretive approach chosen, a qualitative method for gathering data was employed for the primary research. Hammond and Wellington (2012) for example argue that a qualitative strategy is better suited to interpretive approaches to research methods. Qualitative research starts with assumptions, a world-view, potentially using a theoretical lens and studying research problems exploring the meaning individuals or groups impute to a certain problem (Creswell, 2007). Creswell (2007) further argues that in order to explore this issue, researchers employ a qualitative approach to inquiry, collect data in the natural setting sensitive to people under study and conduct inductive data analysis through the establishment of patterns or themes. At the end, the study should include the thoughts of participants, reflexivity of researcher, detailed description and interpretation of the problem, which finally extends the literature or calls for some kind of action (Creswell, 2007). However, this study covers both areas – extend the literature by increasing the understanding of collaborative risk management, whilst also calling for action on collaboration within the aerial adventure industry. Qualitative research collects rich information about few cases (Veal, 2006). Jennings (2001) argued that research based on a qualitative method is founded in the interpretive social sciences, inductive in nature and consists of data that is presented in text, rather than in numbers, as would be the case with a quantitative method. Bryman (2008: 366) describes qualitative research as a “strategy that usually emphasises words rather than quantification in the collection and analysis of data”. Qualitative research should be used when a detailed understanding of an issue is needed, data which may be best obtained through talking to people allowing them to tell their stories (Creswell, 2007). This further enables the researcher to understand and appreciate the context and/or setting in which the participant addresses the problem at hand (Creswell, 2007). Essentially, qualitative research focuses on conducting thorough examinations of individual cases to provide a more detailed exploration of the research question, as opposed to quantitative research (Neuman, 2014). Through qualitative research it is further possible to develop theories in areas where existing theories are either inadequate or simply do not capture the complexity of the research problem

(Creswell, 2007). In the case of this study, in-depth data, on the extent of collaboration as well as the risk management systems in place in the industry, was gathered.

4.4.1 – The Role of the Literature

The role of the existing literature in this study was to establish the context and purpose of a study, its rationale as well as contribution (Haverkamp and Young, 2007). As such, the literature provided the foundations of the study. Despite Silverman's (2013) recommendation that the literature review be written after the data analysis has been completed, the researcher found that by writing the literature review first helped build the foundations on which this study was built on as thoughts and ideas were organised throughout the writing process. This decision finds justification in Farquhar's (2012) work, who argued that the researcher must start writing immediately from the very beginning. The literature further helped relating the study to a larger, ongoing dialogue (Creswell, 2009) taking place in the adventure tourism literature on the role of risk and risk management. Indeed, it was through the literature that the importance of this study was established in regards to the need for more effective risk management procedures, essentially providing the basis for this methodology chapter (Farquhar, 2012).

Strauss and Corbin (1990: 50-3 cited in Silverman, 2013) put forth five roles of the literature in qualitative research:

1. To stimulate theoretical sensitivity, 'providing concepts and relationships' with the possibility of comparing it to actual data.
2. To offer secondary sources of data to be used for initial trial runs of the researcher's own concepts and topics.
3. To stimulate questions during data gathering and analysis.
4. To guide theoretical sampling to provide ideas on where phenomena, key to the study, might be uncovered.
5. To provide supplementary validation by explaining why the findings support or differ from existing literature.

These five roles of the literature will become apparent throughout the sections of this chapter. For example, the interview guides were strongly influenced by the themes

discovered in the literature review. The data analysis and subsequent findings were also influenced by the literature in regards to the development of the codes and themes.

4.4.2 – Research Design

A case study approach was chosen to provide an in-depth understanding of how stakeholder collaboration may improve risk management within the aerial adventure industry. Case study research is the study of a problem setting explored through single or multiple cases (Creswell, 2007). Eisenhardt and Graebner (2007) argue that such an approach is relevant to research projects seeking to gain a deep understanding of the issue being researched. Punch (1998: 50) argues that the ‘... objective is to develop as full an understanding of that case as possible’. Yin (2009) further argues that case study research is one of the best methods to describe real-life as the researcher is able to appreciate the richness of participants describing their experiences in a certain context. Therefore, such a strategy goes hand-in-hand with the chosen approach of this study, particularly bearing in mind the importance of the quality of the data gathering. Real-life recounts were indeed key in the effort to discovering whether collaboration can improve risk management within the aerial adventure industry. Further, unlike other research strategies, case study research enables the researcher to explore and understand context, a central area of concern to case study research (Saunders et al., 2012). Action research was, for example, also considered due to its focus on solving organisational issues through participant collaboration. However, due to the larger scale involved in this study, focussing on an industry rather than a single organisation, as well as the close involvement required of the researcher (Greenwood and Levin, 2006) it was not deemed feasible. Nevertheless, a case study research design allowed the researcher to focus on the issue in similar depth to action research, exploring a phenomenon in context (Farquhar, 2012).

Similarly, Yin (2014) points out that case study research is ideal for scenarios where the boundaries between the phenomenon being studied and the particular context are not obvious. However, there is disagreement within the literature in regards to case study research’s place. Stake (2013), for example, argued that case study research is not a methodology, but a choice of what is to be studied. In other cases, it has been presented as a strategy of inquiry, methodology or an extensive research strategy (Denzin and Lincoln, 2009; Merriam, 1998; Yin, 2014). Creswell (2007) argues that case study research is indeed a part of the methodology, a type of qualitative research design and therefore a product of

inquiry. Case study research is a qualitative approach involving the researcher exploring bounded system(s) through a comprehensive and thorough data collection, which may involve a number of sources of information, and reporting a case description and case-based themes (Creswell, 2007). On the other hand, Cronin (2014), perhaps in order to avoid any confusion, simply states that case study research can take the shape of either a design or a research method. As a result, it is perhaps not surprising it is a particularly popular approach in psychology. Like Creswell (2007) the researcher sees case study research as part of the methodology, however. Indeed, as the following paragraphs and chapter will show, case study research is not just a part of methodology, but constitutes an all-inclusive method representing both design, data collection techniques and analysis (Yin, 2014).

According to the literature, case study research is the ideal method when the main research questions focus on “how” and “why”, as well as situations where the researcher has limited or no control over behavioural events and where the focus of the study is on a contemporary phenomenon (Yin, 2009; 2014; Hammond and Wellington, 2012). Hammond and Wellington (2012) further argue that the purpose behind a case study is not to present the general picture, but instead a particular case to explain the how and why of a phenomenon. As such, the intention of this study was not to explore how stakeholder collaboration might improve risk management procedures in the aerial adventure industry in general, but specifically with a focus on the US aerial adventure industry. By using this approach, the researcher was able to study ‘everything’ in a certain situation, whether it involved individuals, groups, activities or certain phenomenon (Cronin, 2014). As a result, this approach was ideal for the exploratory research nature of this study (Saunders et al., 2012). In the case of this study all but one research questions were focussed on the “how” and “why” whilst the question of how to improve risk management in the aerial adventure industry was also a contemporary issue. The researcher, in this case, had no control over how risk management was conducted within the aerial adventure industry. The “why”, “what” and “how” questions, in this case, included questions such as “why collaborate?”, “what is effective risk management?” and “how can collaboration lead to effective risk management?”.

4.4.2.1 – Designing the case study

Selecting the design behind a case study can be complicated as no comprehensive or standard catalogue exists for case study research (Yin, 2014). Key to the design, however,

was defining the case and setting its limits (Yin, 2014). In the case of this study, the setting of the case being studied was the aerial adventure park industry in the USA, therefore a single case study. It was deemed a single case study approach was appropriate, rather than dividing it up into various cases. Bearing in mind the case in focus was the US aerial adventure industry and its stakeholders within it, it was not deemed necessary to divide each stakeholder into separate cases. The decision to not do so was further justified in the work of Wang & Fesenmaier (2007) and Wang et al. (2013). Their work is of similarity to this study and did not include multiple cases. Wang et al. (2013) could, for example, have split their study into multiple cases, with each case focussing on a different CVB. However, this was not deemed necessary. Further, by having a single case study, the case was not too vague, thus enabling the researcher to delve deep into the study (Yin, 2014). More specifically, a critical single case study research design was employed in order to link theory to data gathering: namely the understanding that stakeholder collaboration can improve risk management procedures. At the same time, though, it is worth mentioning that this could also represent an extreme case, in the sense that the impact of this study may reach far outside the aerial adventure industry, in regards to collaboration's impact on risk management. The US aerial adventure industry was chosen as the case study due to its struggles with risk management in recent years, as detailed in chapter one of this study as well as the researcher's experience and knowledge from the industry. Further, it is an advanced country with an advanced legal system and collaboration is already the norm in the country. Yin (2014) argues that a case should be chosen with access in mind as insufficient access to the data will limit the success of the study. Given the number of parks operating in the US, the number of operators, builders, (potential) regulators, insurance providers and standard writing organisations existing within the country, access was not a considerable issue, however.

Yin (2014) put forth five components of case study research design:

1. The case study's questions.
2. Its propositions (if any).
3. Units of analysis.
4. Logic linking data to the propositions.
5. Criteria for interpreting findings.

These components have guided the design of this study throughout. "How" and "why" research questions were devised to pinpoint the focus of the study. Doing so, helped the

researcher identify the relevant data to be collected and guiding the design of the interview guides for example, whilst also simplifying the linkage between the data and the interview guides. Further, the themes discovered within the data were also developed with the interview guides in mind. Yin (2014) argues that the units of analysis covers two steps: defining the case and bounding the case. To ensure the focus of this case study was clear this study focussed on stakeholder collaboration for effective risk management in the aerial adventure industry. Bounding the case was achieved through focussing on the stakeholders within the industry. Once again, to ensure a clear focus of the study, not all industry stakeholders were included. The stakeholder selection was guided by the research questions of the study, thus focussing on the operators, builders, regulators, insurance providers and the standard-writing organisations as well as Mitchell et al.'s (1997) theory of stakeholder identification and salience. The sampling strategy for this study is further detailed in section 4.5. Finally, in order to interpret the data it was analysed using thematic analysis. The criteria for the themes was also guided by the literature. By addressing these components this study avoided losing its structure by trying to cover everything about participants. Every stage of the case study research design was part of a sequence leading directly to the next and linking empirical data to the study's research questions and conclusions (Cronin, 2014; Yin, 2014). Choosing a single case study found justification in the argument that single case studies are often used where the case in question represents an extreme or unique case (Saunders et al., 2012; Yin, 2009). One could certainly argue that this study represents a unique case, with the accident rate having increased by almost sixty percent in the space of a few years as well as limited research existing on the area. Yin (2003) listed certain criteria needed for an effective case study strategy, namely: the development of the research questions, a justified sampling strategy, and choosing an appropriate data collection method. This criteria was subsequently followed in the design of this study.

4.4.3 – Undertaking semi-structured interviews

In line with the qualitative case study research design of the study, semi-structured interviews were undertaken to gather the primary data. Whilst developing the research design it also became clear that to address the research questions, a research method developing an understanding for 'the lived experience of other people and the meaning they make of that experience' was required (Seidman, 2013: 9). This was of particular

importance to this study given the limited academic research into the aerial adventure industry that had been undertaken prior to this. This is supported by Horn (2009) who states that qualitative research is “interested in exploring meanings, perceptions and understandings” and the researcher deemed that conducting interviews was the most suitable option as a result. In the case of this study, one advantage of conducting semi-structured interviews lies in the process of open discovery generated by this approach to build theory (Collis and Hussey, 2009). Further, these interviews were also what Yin (2014) classifies as Prolonged Case Study Interviews, as they lasted two hours or more. Horn (2009) also argues that qualitative research using an inductive approach researches the general and turns to the more specific. This approach was also used for this study with a look at risk management and collaboration in general during the literature review and then turning towards the more specifics of answering the research questions through the data gathered in the interviews.

Hammond and Wellington (2012) defined interviews as conversations between the researcher and the people being researched. However, they further point out that interviews are not of a natural kind, as certain rules still have to be set, such as the subject of the conversation, thus constituting more guided conversation (Hammond and Wellington, 2012; Yin, 2014). Thus, two jobs existed for the researcher during the interviews; following the line of inquiry, whilst still asking conversational-style questions in an objective way that serve the line of inquiry (Yin, 2014). As a result, the list of interview guides, found in the appendices, do not reflect the conversation accurately as the questions were not necessarily asked in a set line of inquiry. Further, some questions were asked during the interviews that were not part of the listed interview guides, but reflected the interviewer’s ability to follow up leads and probe during the conversation. The ability to probe the interview participant in an appropriate manner further improves the study’s credibility and its overall strength (Rubin and Rubin 2012). Veal (2006) points out that the belief behind qualitative research in most cases is that the people personally involved in the problem being studied are the ones best situated to explain their experiences. Veal’s (2006) point therefore supports the researcher’s decision to interview key stakeholders of the industry, namely builders, operators and regulators.

The researcher was able to gather detailed thoughts and opinions of stakeholders within the industry in regards collaboration and effective risk management with emphasis placed

on the participant's view of what constitutes effective risk management, their understanding of collaboration and what it entails as well as their thoughts on involving state agencies. The two latter points were important to the researcher to gauge whether collaboration is viable in the industry and also whether state agencies would be welcome. This study has, for example, already highlighted the importance of the attitude of collaborators for it to be successful. Walliman (2011) argued that interviews can be used more effectively for researching very sensitive topics and given this study touches on a rather sensitive issue, namely: the risk management procedures already in place. Given the importance of risk management in the industry and the results of ineffective risk management, one could certainly argue that this is a sensitive subject for operators and builders. Another sensitive subject is that of involving state agencies in the risk management procedures, due to the industry's apprehension at such notion.

Unstructured as well as structured interview processes were considered, but given semi-structured allowed the researcher to probe participant answers, whilst still maintaining some structure to the conversation (Jennings, 2001) the researcher deemed this approach the most suitable. For example, the rapport established with the participant as a result of this approach enhanced the likelihood of "deeper" information gathered as trust is built between the two (Jennings, 2001). The rapport between the researcher and the participant is key to the overall success of the study as the data is gathered through this relationship, whilst it also strengthens data validity (Knox and Burkard, 2009). Semi-structured interviews also allow the researcher to follow up with further questions that may arise as new data gathered during the interview (Saunders et al., 2012; Knox and Burkard, 2009; Hill et al., 2005). Indeed, with it being semi-structured the questions are only predetermined to a certain extent and are used more as a guidance for the researcher (Jennings, 2012). Saunders et al (2012) further points out that where the data to be gathered is likely to vary, semi-structured interviews are also ideal. The information gathered for this study is likely to vary to a certain extent. For example, opinions may differ as to whether state agencies should be involved. Interviews, in general, further enables the participants to process their own thoughts as well as they hear their own thoughts out loud and perhaps reach new conclusions themselves (Saunders et al., 2012). Therefore, this approach is not only beneficial to the researcher, but also to the participant.

Creswell (2007: 132) identified eight steps to interviewing which were largely followed during the data gathering:

1. Identify participants.
2. Determine most suitable type of interview, such as face-to-face or over phone.
3. Use adequate recording device.
4. Design and use an interview protocol with open-ended questions. The questions should represent the central question and research questions behind the study.
5. Refine questions and procedure through a pilot study.
6. Determine place for conducting interview.
7. Obtain consent.
8. During interview, stick to the questions and be courteous. Let the participant do the talking and listen instead. The interviewer simply guides the conversation.

In line with Creswell's (2007) eight steps a number of decisions had to be made. The design of the interview guide is also further discussed in section 4.4.3.1, but was guided by the literature review as well as the aim, objectives and research questions of this study. It was determined that, due to the long-distance nature of the study, the interviews would take place over the phone, using call-recording software. As such, the place for the interviews became irrelevant. Prior communication took place over phone and email, with consent forms exchanged over email. Further, a pilot study was run to start with to answer the interview questions, of which more detail can be found in section 4.2.2. However, the researcher did not stick entirely to the interview guides, due to the nature of the interviews. New questions were devised, for example, during the interview in response to certain answers provided by the participant. As an example, participant 16 was asked why they had stopped collaborating with the industry for a number of years and were now returning once again.

The interviews were of an exploratory nature to gain an understanding of the industry's opinion with regards to collaboration and risk management as well as to gain basic insights into the current state of the industry, such as operating and/or inspection procedures. By asking open questions, the researcher was able to gain a deeper insight into the thoughts of key industry stakeholders with regards to the research questions. Saunders et al (2012) argues this approach allows for clarification of the researcher's understanding of the issue

at hand. Horn (2009) further states that research of an exploratory nature is often carried out when investigating areas with little or no research, which is clearly the case here as well. Further to that point, Neuman (2014) remarked that this approach is perhaps more complex than others available to the researcher as the guidelines are limited, anything could potentially be of great importance and the direction of inquiry can change frequently. As a result, it was important for the researcher to be creative, open minded and flexible when conducting the interviews. Nevertheless, as the interviews were 1-on-1 it ensured that the data gathered was valid and reliable, as opposed to focus groups, as participants in that case might not want to disclose any confidential information in front of competitors. This, in turn, ensured the research questions, and objectives set forth in the introduction, were answered. The interviews took place over the phone.

4.4.4 - Designing semi-structured interviews

The development of the interview questions was guided by information gathered from the literature review chapters as well as the aim, objectives and research questions put forth in section 4.2 of this chapter. Agee (2009) noted that a poor standard in interview guides will affect the following stages of a study negatively, thus the interview-design stage was critical. As such, the interview guides needed to retrieve information in regards to the intentions and perspectives of the interview participants. Indeed, the process of questioning in qualitative studies is key to understand the perspectives of participants (Agee, 2009). However, the interview design process was ongoing with questions being developed and defined through all stages of a reflexive journey (Agee, 2009). This process provided a central point of reference in the assessment of the appropriateness of the decisions made by the researcher at numerous stages throughout the study (Flick, 2007).

4.5 – Sampling Strategy

Due to the importance of the quality of the interviews to the overall validity of this study, using the right sampling technique was critical. Thus, key to ensuring the validity of the study was the link between sample and the sample universe, the right choice of sample strategy, the strength of the sample sourcing approach and the general fit between the research questions and the total sample strategy (Robinson, 2014). For this study, non-probability sampling techniques were utilised as using random sampling was not deemed

feasible. This was due to only certain stakeholders being considered for this study, and not all cases within the sample universe. A combination of convenience sampling, snowball sampling and purposeful sampling techniques were employed. Weathington et al. (2012) argue that convenience sampling is the most common technique of non-probability sampling and that the data gathered does not represent the population as it may leave out other key stakeholders for example. In this case, one could argue the key stakeholder being left out is the customer. This stakeholder was left out due to their lack of technical knowledge and because the public would be represented by the public stakeholder – the state.

As such, whilst the public stakeholder possess the knowledge and expertise required to participate in this study, the researcher also deemed this particular stakeholder to be a representative of the consumer, meaning the consumer's voice is still being heard. Indeed, chapter 5.2.9 discusses the influence of external stakeholders on risk management procedures from the interview participants' point of view, yet the consumer is not mentioned during these discussions as an influencer. Here, the influence of the insurance agencies and the government is discussed, further justifying the omission of the consumer. Undoubtedly, the actions of the consumer has consequences to risk management procedures, but this is perhaps in a less direct manner and once again highlights their lack of expertise to directly influence risk management procedures. Other, similar case studies investigating stakeholder collaboration, such as Ladkin and Bertramini (2002), Wang and Fesenmaier (2007), Beritelli (2011) and Wang et al. (2013) did not include the views of tourists neither. These studies instead focussed on public-private collaboration or private-private collaboration, though no specific justification of the omission of the tourist is obvious. As an example, Ladkin & Bertamini's (2002) case study on collaborative planning in Peru included semi-structured interviews of key stakeholders of the Peruvian tourist industry, yet did not include the actual tourist as an interview participant. Nevertheless, according to Google Scholar, it has been cited 190 times at the time of writing. Similarly, Beritelli's (2011) case study on a tourist destination in Europe included interviews with public and private stakeholders, yet no tourist was interviewed. According to Google Scholar, this study has been cited 272 at the time of writing. However, it is worth mentioning Graci's (2013) work on sustainability practices in Indonesia, which did include the views of tourists. Here, one could argue that sustainability practices within a tourist destination do indeed rely on the actions of the tourist itself as well. Finally, access issues

to the consumer were also considered, with many operators being unlikely to grant access to their consumers in light of the sensitive matter of discussion. This was further highlighted during the interviews, which indicated an industry, in its current form, where stakeholders were somewhat hesitant to share information with each other.

Horn (2009) further argues that convenience sampling techniques are used simply due to the accessibility of participants. However, that is not the case in this study. Whilst participants may be chosen because of their ease of accessibility, the key criteria is their expert knowledge. Purposeful sampling was therefore also utilised with participant selection partly based on their suitability or purposefulness for the study (Patton, 2002; Yin, 2011). Saunders et al (2012) argues that when using the purposeful sampling technique it is up to the researcher to use their judgment to select participants that will best answer the research question. There should also be a need for information-rich participants. This was the case in this study, with limited secondary research exists on this topic hence the need for information-rich participants. Neumann (2014), also points out that purposeful sampling is generally employed when working with particularly small samples, which is also the case in this study. Snowball sampling was used if some potential participants were difficult to reach (Jennings, 2001; Creswell, 2007). For example, the researcher did experience some access difficulties, due to a number of reasons, such as the nature of the study as well as the researcher's background in the industry, with some refusing to take part for these reasons. This included one of the major brands within the industry, but given the final interview participants included representatives from brands of similar value, some exceeding even, this was deemed a mere disappointment. It was not deemed to have any serious implications in regards to the final outcome of the study, though their input would have been of value. As a result of the access issues, some participants were reached through the help of an existing participant. As such, saturation may not have been reached without the use of the snowball sampling strategy.

4.5.1 – Sampling Population and Criteria

Saunders et al (2012) recommends a sample size of 5-25 semi-structured/in-depth interviews, though they also argue that data gathering should be continued until saturation is reached. As a result, it was impossible to plan a specific number of interviews. Silverman (2010) argued that the key is for the researcher to monitor and be responsive throughout

the data collection to ensure that too much data is not gathered, which would constitute an ethical issue in terms of wasting participants' time. Access issues play a key role as well, with this process being unpredictable in many cases. For example, if gaining access is more difficult than anticipated, Robinson (2014) argues that the sample size may need to be reduced accordingly. On the other hand, a lack of access issues may also lead to more cases than originally anticipated, hence the need for monitoring data saturation (Robinson, 2014). However, Horn (2009) and Creswell (2007) argue that it is not possible to represent the entire population through these samples and it may therefore be difficult to generalise the results. One could argue, however, that having reached saturation, for example when no new information is being introduced during interviews, as originally opined by Glaser and Strauss (1967), this should therefore also represent the majority of the population. Nonetheless, no agreed upon method of establishing when data saturation has been reached, resulting in confusion (Francis et al., 2010). This study, nevertheless, follows the method put forth by Glaser and Strauss (1967). First step in the sampling strategy was defining the sampling universe (Robinson, 2014).

Smith (2015) identified 252 aerial adventure parks in the US, though little specific information was available on these parks. There are 50 states in the US, all of which regulate or may regulate the industry. However, the exact amount of builders and insurance providers within the US is not clear. The ACCT's Preferred Vendor Member list has 34 US-based Preferred Vendor Members (PVM), constituting builders who are ACCT members and meet certain criteria. As a result, the PVM list acted as a guidance for this study's sampling strategy. Further, only insurance providers offering insurance for organisations within the aerial adventure industry were approached. With these facts in mind, the researcher had at least 336 stakeholders, and thus potential participants as industry stakeholders, namely private, public and third sector stakeholders from the US aerial adventure industry were approached to participate.

In the end, builders, operators, insurance providers, engineers, potential/actual regulators and standard writers were interviewed for this study. Senior managers from the respective organisations were approached to participate due to their knowledge and influence in regards to risk management procedures and industry collaboration. The states with the most aerial adventure parks were given priority in the hope that they would have more experience and understanding of collaborating with the industry. States represented by the

interview participants included Florida, Colorado, North Carolina and Oklahoma. Further, some operations were SMEs, whereas others were major operations or part of larger resorts/brands. However, as previously stated, one stakeholder group, the consumer, was left out. Whilst this study does recognise their legitimacy, it was deemed they lack the required knowledge, experience and expertise on such complex matters as risk management and stakeholder collaboration. Instead, a more knowledgeable stakeholder was deemed more apt, the state. Bearing in mind the objective of the state is to uphold public safety in this case, their participation and representation of the consumer was deemed appropriate.

The sampling strategy was further aided by Mitchell et al.'s (1997) theory of stakeholder identification and salience. This framework recognises all stakeholders, but prioritises certain stakeholders over others. As a result, it was deemed this framework was most suitable for this study. Stakeholder legitimacy was the attribute used to guide stakeholder identification for the study.

4.6 – Pilot Study

A pilot case study was run in order to test the suitability of the study, but also to refine the data collection plans in regards to context and procedures (Yin, 2014). Three interviews took place and have been included as part of the data gathering for the study overall. Transcripts, interview guides and consent forms can be found in the appendices. A regulator, operator and builder were interviewed with questions focussing on risk management and collaboration. Important lessons were learned during this stage. For example, as the researcher had no idea how long the interviews would last, giving the participants an accurate time slot to set aside for the interview was complex. An hour and a half was suggested, when in fact the interviews took between two and three hours. Going forward, out of respect for the busy schedules of participants taking part in the study being able to provide a more accurate time slot was an important lesson. Another stakeholder was also identified, namely the insurance provider. Originally, this stakeholder group was not considered, but during the pilot study it became apparent that this group holds much influence, for obvious reasons. Finally, and perhaps more importantly, the research received support from the participants during the pilot study, meaning that, albeit with a few changes, the study was able to go ahead. It was, for example, decided that the

interview guide for the pilot study had too many questions and was subsequently shortened from forty-three to thirty-two questions. All sets of interview guides can be found in the appendices. However, as an example, question ten from the pilot study interview guide, “how does your focus on risk management balance between compliance and being a strategic approach” was removed. It was decided that the question did not fit into the flow of the conversation, whilst it also confused some interview participants during the pilot study.

4.7 – Ethical Issues

Saunders et al (2007) put forth six ethical issues that arise during a research project relating to the:

- Privacy of possible and actual participants
- Voluntary nature of participation and the right to withdraw partially or completely from the process
- Consent and possible deception of participants
- Maintenance of the confidentiality of data provided by individuals and their anonymity
- Reactions of participants to the way in which data is used, analysed and reported, particularly avoiding embarrassment, stress, discomfort, pain and harm.
- Behaviour and objectivity of researcher

Flick (2007) also states a further three essential principles of ethically sound research:

- Interpretation and accuracy of data should be the leading principle. In other words no omission or fraud should be carried out with the collection or analysis of the data in relation to the participant, respect for the person should be seen as essential.
- The well-being of the participant should be considered. In other words: do not humiliate the participant for example.
- The benefits and burdens for the research participant should also be considered.

During the writing of this study these points were followed very carefully, as were the MMU Ethics requirements, to ensure that all participants were treated ethically correct and

as a result Manchester Metropolitan University has granted ethical approval, included in appendices. For example, the researcher considered the well-being of the participant, as well as the participant's organisation, of paramount concern. The researcher also attempted to be as objective as humanely possible to ensure the data was presented in an ethically correct manner with as little bias as possible. Neuman (2014) argues that being ethical means that the researcher should balance the value of advancing knowledge against the value of non-interference in the lives of other people. If the researcher chose not to consider the well-being of anyone participating in this study, for example, it would probably mean denying those people of their basic human rights. At the same time, if no interference took place at all no research would be carried out, thus getting the balance right was essential during the writing of this study. It was also vital to have a focussed research question with clear planning ahead of the data gathering taking place to avoid "over-researching" participants and thus having the situation talked about more extensively than necessary (Flick, 2007). Given that the participant may already be nervous about taking part in this study it was important to ensure that no more probing than necessary was carried out.

The identity of any person and/or company taking place in the research project has been kept anonymous by simply using pseudonyms instead of the actual names of the person and/or company. Nor has any identifiable details regarding the person and/or company been mentioned at any point of this study, such as the location of the company, as this would defeat the purpose of anonymity. Anonymity will be maintained post submission of this study as well. Transcripts from each interview can be found in the appendices. However, any details that may assist in identifying the participant's identity have been removed. Researchers agree that obtaining informed consent must be done prior to interviews taking place where possible (Flick 2007; Neuman 2014; Saunders et al 2012). When original contact was made with the potential interviewee, they were informed of their rights to withdraw at any time as well of the fact that anything said would be completely confidential. Potential participants were contacted via phone and email. Email was particularly important as it ensured a written record of what had been agreed upon was kept, however a consent form or email was also sent to all participants. No interview took place before the participant had agreed to the conditions set out in that form or email. It was originally decided to just be a consent form, which participants in turn would sign and return to the researcher, however, due to some participants' busy schedules that

was not always possible and as a result a simple email, stating the same terms as the consent form, was sent out in those cases instead. A copy of the consent forms used, one for each stakeholder category, can be found in the appendices. The forms were designed according to Fink's (2007) criteria with them outlining the purpose of the study, the expectation from the participant and the procedures with data, such as how anonymity was guaranteed. The intention of the consent form was to ensure that participants thus knew exactly why the interview needed to take place and how their participation would be used in the report. However, by reading the consent form it also allowed participants to properly prepare for the interview and get any necessary clearances from their own respective organisations for example. By preparing for the interview, the likelihood of any misunderstandings and uncomfortable situations arising were thus decreased. After each interview, a copy of the voice recording from the interview was emailed to the participant by the researcher for their own records and approval to ensure nothing was misunderstood and thus no harm caused. The intention was also to help alleviate any stress the interviewee may have developed as a result of the interview topic being of a sensitive nature. Finally, throughout this project the researcher has maintained an open and objective mind about the research question ensuring as little bias as possible.

4.8 – Reflexivity

'All research is subjective, whether qualitative or quantitative' (Williams and Morrow, 2009: 579). During any research project it is important for the researcher to examine his/her own beliefs, judgments and practices and how these are likely to further influence the project (Hammond and Wellington, 2012). Essentially, reflexivity involves the questioning of the researcher's taken-for-granted assumptions (Hammond and Wellington, 2012). As such, reflexivity also includes subjectivity (Jennings, 2001; Williams and Morrow, 2009). The onus, however, is on the researcher to explore and manage his/her subjectivity through reflexivity (Johnson et al., 2007). Creswell (2007) for example argued that the researcher's writing style is a reflection of his/her interpretation based on cultural, social, gender, class and personal politics brought to the research. What has been written are co-constructions and representations of an interactive process that has taken place between the researcher and research participants (Gilgun, 2005). Reflexivity, as a result, plays a key role in the overall trustworthiness of a study (Williams and Morrow, 2009). Further, Creswell (2007: 178) argues that only the best writings acknowledge its own 'undecidability

forthrightly'. It is important to consider how one's writing and interpretation may affect the people who have participated in the study, as was explained in the previous section on ethics. Whilst it is understood that what has been written may be understood in numerous ways, depending on who is reading the material, the researcher's own interpretation must not silence some participants as this would be contradictory to the essence of qualitative research, which seeks to hear all voices (Gilgun, 2005; Creswell, 2007).

There are numerous ways to be a "reflexive" researcher. For example, Morrow (2005), Williams and Morrow (2009) describe the process of "bracketing", involving the researcher bracketing personal biases prior and then using reflective journalism. By doing this, the researcher is aware of his/her own perspectives and opinions, allowing for the recognition and subsequent separation of own experiences from the participants' stories (Williams and Morrow, 2009). Lincoln and Guba (1985) argue that having the participants check the interpretations of the researcher throughout the research process, not only avoids potentially harming participants, but also builds a collaborative relationship and thus increases the trustworthiness of the study. Another option is to have a team of researchers and an external auditor to achieve trustworthiness (Hill et al., 2005). The researcher's own personal and professional experience has, to a certain extent influenced this study and as a result this experience is outlined in this section.

"My experience with aerial adventure parks started in the UK in 2005 when I participated on one of the first courses in the UK. During this experience I developed a great passion for aerial adventure parks. I personally have a fear of heights, which was greater until my experience in 2005. As such, despite it being a commercial park, I still learned things about myself whilst having fun as well. In the winter of 2006 a skiing trip to New Hampshire subsequently led to the idea of opening up an aerial adventure park in the US, which eventually opened in 2008. Not only was this a great adventure and experience for my professional development, but personally I also grew up with this business in many aspects. Being the first aerial adventure park in the country to open its doors to the general public we were met with great scepticism and as such it is interesting looking at an industry that has since developed to become a billion dollar plus activity since. Our risk management procedures were part developed by ACCT and part our own as the standards available at the time were meant for educational parks and not high-throughput as ours. It was during the development of our own procedures that I began thinking about the need for

collaboration on this aspect. These thoughts grew particularly when other parks began to open up and perhaps did not seem to be as vigilant on their own risk management procedures. The standards available at the time were not enforceable. The sense of enforcement was an insurance premium discount if operators followed the ACCT standards.

Having sold the business in 2012, I embarked upon a master's degree at Manchester Metropolitan University. Despite having left the aerial adventure industry, I was still very passionate and excited about it. During the master's degree I wrote a dissertation focussing on the advantages and disadvantages of regulating the US aerial adventure industry. This in turn opened up my eyes to the lack of academic research being conducted in the aerial adventure industry, despite the size of it globally. Indeed, it further solidified my interest in the industry as a whole, but in particular the risk management side of it. In many respects I consider the master's degree the starting point of my academic journey inside the aerial adventure industry and the PhD the next step for me to take to not only develop my own academic skills, but also to further become an academic expert as well as a professional expert in this field, two things I believe can only help in my further professional and personal development.

In my own experience, this is an industry that is growing incredibly fast, but at the same time it can be incredibly stubborn when it comes to change. Some stakeholders are very much against the notion of collaborating with competitors, not to mention the government, believing it will only harm them. It is worth mentioning that I too share the "nervousness" of some stakeholders at the notion of government involvement, but given the current state of the industry, I believe it is an avenue worth exploring. If done well, it would only provide a benefit to the many people affected by the aerial adventure industry, in one way or another, hence why this study attempts to show how this might be achieved. I hope that through this research this nervousness, or fear, might be extinguished and replaced with a much more open mind.

Having lived in the US and worked in the aerial adventure industry, has undoubtedly shaped my research. For example, during the data gathering I was very careful in bringing up the subject of potential government involvement in regulating the industry as many Americans become uneasy at such notion. Throughout the interviews, I was also mindful of

not projecting a previous business owner from the industry, but a researcher so as to avoid any misconceptions and or biases or thoughts thereof. I was very aware that whilst in many respects my background in the industry is beneficial, it can quickly turn into a considerable disadvantage if not managed correctly. Indeed, in many respects that is how I have changed and, or, developed throughout this PhD process as I have become more of an academic and less a business person, though the latter still remains somewhat. My way of thinking has naturally become more analytical, which I discovered was a requisite of writing the PhD. Further, my research skills have improved immensely. Most importantly, however, my academic writing has come on leaps and bounds as I have transitioned from industry to academia.

Going forward, I believe the potential for further research in this industry is unlimited. The most obvious is perhaps conducting some type of quantitative research, but I also believe a study looking at collaboration within the industry long-term would be highly beneficial. Using action research as a strategy, starting as the industry attempts to create the safety committee would be a challenging, yet worthwhile piece of research and would undoubtedly contribute to knowledge both theoretically and to the industry as behaviours and results are analysed throughout the process and going forward. In my opinion, conducting a five year study would suffice. Such a study could possibly focus solely on collaboration theory. As such, I see my own academic research interests focus primarily on attraction management and the theories surrounding collaboration and stakeholder management in the immediate future. It is my opinion that the aerial adventure industry could learn a great deal from similar industries, given its infancy, and there is a possibility that such research would also contribute theoretically. Finally, it is my hope that this study will prove beneficial to the aerial adventure industry and academia whilst of course adding a PhD to my own qualifications”.

4.9 – Data Analysis

This section focusses on the analysis of the data collected for this study. This section was key to the overall study, with the following interpretations developed as the researcher made sense of the data at hand as well as the lessons learned throughout the study (Lincoln and Guba, 1985). Creswell (2007) argues that these interpretations may be based

on hunches, insight or intuition formed via the larger meanings gathered from the data. As the case study focussed on an industry, but gathered data through speaking to various stakeholders within it, an embedded analysis was employed. This allowed the case study to focus on the industry as a whole, whilst not forgetting the “sub-units”, or stakeholders, that ultimately make up the industry (Yin, 2014). The interviews were transcribed verbatim and can be found in the appendices. This made the subsequent reviews of the raw data easier, as argued by Boyatzis (1998). Case studies often focus on one or two issues that are key to the system being studied, in this case, collaboration and risk management, and as a result the researcher was unable to simply focus on the perspective and the voice of the participant, but also the context in which it was expressed (Cronin, 2014). Thematic analysis was used to carry out the analysis the data to assist in this. According to Boyatzis (1998), thematic analysis is ‘a way of seeing’. Qualitative research is particularly diverse and thematic analysis provides the foundations to qualitative analysis (Braun and Clarke, 2006). Indeed Braun and Clarke (2006) further argue that it should not be considered a stand-alone tool, but one to use across various methods. Using this approach, researchers are able to see what others might not as patterns or themes are discovered within the data collected (Boyatzis, 1998). Given the sheer size of the data collected, the interview transcripts total more than five hundred pages, it was critical to employ a rigorous organised and systematic method of data analysis, which thematic analysis clearly offers. Essentially, organising the data into themes made it easier for the researcher to analyse the data.

Thematic analysis was used to understand qualitative information, such as interviews, using a process of encoding, a list of themes for example. Boyatzis (1998) points out that themes are patterns found in the information, which describe and organises possible observations and then interprets the aspects of this phenomenon. It is a process whereby the researcher takes the text apart in order to find codes and themes (Creswell, 2007). Through this process, large data is organised into minimal rich data (Braun and Clarke, 2006). However, due to the large amounts of data gathered, as is generally the case in qualitative studies, data management provides the foundation of data analysis, for how can one analyse an incomplete data set (Creswell, 2007)? As a result, every step taken by the researcher during the writing of this study was documented. Copies of the interview guides, transcripts and consent forms can be found in the appendices, for example. Further, all interviews were organised and archived as have all journal articles and notes from the various books read. Throughout, data management has been key to this study.

Thematic analysis increases the accuracy and sensitivity of the researcher's understanding and interpretation of the data collected. Creswell (2003) points out that the themes showcase numerous perspectives from participants that can further be supported by the literature. For example, the themes developed for the study were supported by segments from the interviews (Creswell, 2007). The thematic analysis process involved three stages: deciding on sampling and design issues, developing themes and a code and finally validating and using the code (Boyatzis, 1998). Creswell (2003) further argues that this approach is ideal for designing useful descriptions for case studies. Whilst thematic analysis is widely used, Braun and Clarke (2006) argue that it is not always explicitly claimed as the method of analysis, despite most qualitative analysis being thematic. This is perhaps down to it being a poorly branded method (Braun and Clarke, 2006). For this study, an abductive approach was chosen as this involved developing thematic codes from the literature as well as the data collected. Given the interview guides were guided by the literature, it was inevitable that themes in the data collected would also reflect the literature. Further, themes were developed through the use of NVivo. Codes are categories where important pieces of data are attached (Saunders et al., 2012). Thematic codes should display 'the qualitative richness of the phenomenon', which can then be used in the analysis, interpretation and presentation of the researcher (Boyatzis, 1998: 31). The subsequent name for the code should relate to the purpose of the research (Saunders et al., 2012). Bearing this in mind, two codes were devised, namely risk management and collaboration, both of which will be further explained in the next chapter, chapter five, of this study.

4.9.1 – Themes within the data

Risk management and stakeholder collaboration, the two codes mentioned previously, provided the foundation of the findings from the primary data. To organise the data further and to provide clarity, a number of themes for each code were subsequently developed as well, namely:

Risk Management

- Perceived Risk
- Defining Risk
- Challenges of effective risk management
- Human factor

- Training to prevent
- Communication
- Culture
- Innovation
- Leadership
- Combining standards
- Effective risk management
- Stakeholder influence on risk management
- The wider impact of an accident

Stakeholder Collaboration

- Stakeholder Collaboration
- The need for data
- Benefits of collaborating
- Exchange Days
- The requirements for stakeholder collaboration
- Barriers to collaboration
- Motivating stakeholders to collaborate
- The public stakeholder’s industry experience
- Leadership
- Collaborative risk management

These themes subsequently provided the foundation for the analysis, findings and conclusion chapters. The table below provides a brief summary of each theme.

Code	Theme	Summary
Risk management	Perceived Risk	Perceived risk is key to the activity. However, clearly there’s a fine line between perception and actual risk and the latter does indeed exist. Some participants spoke of there being no risk or very low-levels thereof and others spoke of an inherent risk. It would seem that,

		depending on the effectiveness of risk management policies and procedures in place, there will always be some risk involved, but compared to other adventure sports, such as rock climbing, it is much more hidden.
	Defining Risk	Whilst, there is an inherent risk, the data shows that, to a certain extent, it is mainly a perceived risk. It would seem that without this perception there is no aerial adventure activity, or certainly not a sustainable one. This is what attracts people to adventure. On the other hand, in the case of aerial adventure parks, perceived risk is managed risk. The actual risk has been mitigated to create a perceived risk and as such effective risk management becomes key.
	Challenges of Effective Risk Management	The data would seem to indicate the challenge lies in turning actual risk into perceived risk, a task that involves many layers of risk management, such as staff and participant training, communication, proper use of equipment, design and following standards.
	Human Factor	The level of participation taking place among participants also provides a great challenge to effective risk management. Indeed, the interview participants seemingly alluded to risk always being present as long as humans were involved, due to human error and participants choosing not to follow the rules. This has, in turn, resulted in the industry becoming more risk averse and the activity apparently moving towards a more passive experience.

	Training to Prevent	The industry is seemingly putting much attention to the training and education of its staff and participants as a way to manage the risks facing everyone involved in it. As such, it appeared a rather comprehensive approach, involving first the education and training of staff, who in some cases are certified, and they are then expected to transfer their knowledge to participants. Seemingly, the education and training of participants provides the industry with its key tool of managing the perception issues currently existing.
	Communication	As such, it would appear that without effective communication it is seemingly impossible to achieve effective risk management. It also became apparent that the knowledge within an organisation is what assists in achieving effective risk management. Through communication, equipment is used properly and with an ever-changing landscape of equipment in the industry, this is key.
	Culture	Many participants found that by creating an open culture, allowing anyone to come forth with issues or concerns, in regards to risk management that this too helped ensure that risk management was more effective. For these companies to be as successful as they are, they've had to instil a culture of "anyone can say stop", knowing that it, in turn, may prevent incidents and, or, accidents.
	Innovation	Innovation brings both solutions and challenges to the aerial adventure industry. Perhaps somewhat ironically, the issues caused by innovation seemed to have been solved through further innovation. Indeed,

		innovation also appeared to present the industry with new unknown risks, thereby creating a never-ending cycle of need for innovation.
	Leadership	Leadership is another essential layer to achieve effective risk management. It creates the culture and it sets the standards that the rest of the organisation adheres to. It would appear that without effective leadership, the process of achieving effective risk management, therefore, falls apart.
	Combining Standards	Whether to combine the standards or not was an issue that came up during the interviews on a number of occasions. Indeed, it seemed that some friction existed within the industry due to the number standards currently available. As such, one could deduct that perhaps in order for the industry to achieve industry-wide stakeholder collaboration, the standards would need to be combined to bring all stakeholders together.
	Effective Risk Management	Effective risk management almost consumes the organisation. It's a holistic approach, involving everything within an organisation, consisting of various layers, according to the data. Further, the data leaves one with the impression that effective risk management is a never-ending process. Bearing that in mind, it also becomes obvious that effective risk management is not achieved by going at it solo. Outside input is required.
	Stakeholder Influence on Risk Management	The influence of the public stakeholder varied from state-to-state. Primarily, it seemed the states were more focussed on the zip lines than anything else. However, the main

		influencer appeared to be the standard-writing organisations, such as ASTM, ACCT and PRCA. Naturally, the insurance providers also influenced the industry, particularly influencing what standards to follow, thus also representing a type of regulator to the industry.
	The Wider Impact of an Accident	From the data it appeared that the participants were well-aware of the impact one incident might have on the rest of the industry. Somewhat surprisingly, some states had, however, decided not to interfere in the industry until a serious accident occurred, when one would imagine they would want to prevent that in the first place.
Stakeholder Collaboration	Stakeholder Collaboration	Collaboration does take place within the aerial adventure industry, though only to a certain extent and, perhaps, in smaller groups rather than industry-wide. It seemed the purpose behind collaboration within the industry was learning from each other through the sharing of knowledge and data in the belief that this, in turn, would improve risk management procedures for the individual operations and the industry as a whole.
	The Need for Data	More incident-data sharing is required within the industry, though uncertainty as to how this might take place was evident during the interviews. Indeed, the lack of data sharing seemed to indicate the struggles the industry currently faces in regards to stakeholder collaboration. The data seemed to indicate that the sharing of knowledge amongst stakeholders was key and that the industry needed to open up further.

	Benefits of Collaboration	The data indicated number of benefits of stakeholder collaboration to both public and private stakeholders. Co-learning and co-understanding appeared some of the main benefits, leading to continuous improvement and development of the activity and the industry as a whole. It would seem that everyone in the industry benefits from collaborating with each other.
	Exchange Days	Arranging exchange days with other industry stakeholders would benefit the individual stakeholder as well as the industry overall as stakeholders are able to learn from each other and thereby improve their own operations. It seemed the closed mind-set of the industry was preventing this from happening.
	The Requirements for Stakeholder Collaboration	The interview participants seemed to agree on a number of requirements, including trust, to achieve stakeholder collaboration. It was widely believed among the participants that these requirements, in turn, led to healthy collaboration, which leads to a stronger and healthier industry. However, it was noted that these requirements did perhaps not exist at a sufficient level.
	Barriers to Collaboration	A number of barriers to collaboration clearly exist in the industry, including trust. It seemed that a lack of infrastructure encouraging collaboration existed in the industry. Some participants, for example, called for an anonymous forum to be able to share experiences and learn from each other that way, whilst also commenting on the need for controlling the spread of inaccurate information within the industry.

	Motivating Stakeholders to Collaborate	It was argued that conferences should be more accessible, either through the creation of regional conferences and, or, the creation of virtual conferences, once again referring to the improvement in infrastructure required. Therefore, the data seemed to suggest that responsibility resided, to a certain extent, with an organisation like the ACCT in ensuring said infrastructure is available, but, potentially, also requiring its members to actively participate.
	The Public Stakeholder's Industry Experience	The data seemed to suggest that the level of industry experience among public stakeholders trying to regulate the industry had, on occasion, been rather problematic. According to the data, some public stakeholders did not seem to have the knowledge to regulate the industry, a clear cause for concern among the private stakeholders. On the other hand, it seemed many states had opened up to the industry in an attempt to understand it.
	Leadership	The data indicated a requirement for strong leadership in facilitating stakeholder collaboration at an industry-wide level. If the industry lacks infrastructure, it appeared someone has to create said infrastructure and someone or something has to provide the means to facilitate such collaboration.
	Collaborative Risk Management	With a lack of infrastructure currently providing a barrier to collaboration within the industry, the data seemed to suggest that the interview participants, perhaps somewhat apprehensively, felt the creation of an industry-body with the sole-focus of improving risk management would be beneficial. The existing organisations, such as

		<p>the ACCT or ASTM, could arguably provide the infrastructure for the safety committee. Nevertheless, it appeared that such a body, in combination with something similar to SaferParks, would provide the industry with means to collaborate on such a sensitive matter.</p>
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Chapter 5

5.0 – Data Analysis

5.1 – Risk management

5.1.1 - Providing a thrilling, but safe experience

As mentioned in the literature, aerial adventure parks have a paradoxical relationship with the notion of risk (Fletcher, 2010). Participants want to have a thrilling experience, yet do not want to experience actual harm. Likewise, the industry wants to create thrilling experiences that will keep customers returning without having customers confronting actual danger. As such, a perceived risk has become key to the attraction of aerial adventure parks. As participant 8 pointed out: “... I think it’s actually very important. Without a perceived risk it’s not adventurous. So, that perceived risk is what makes it adventurous”. As pointed out in the literature, it would appear that people are, in part, attracted to aerial adventure parks due to the predictability of everyday life today (Cater, 2006). For example, participant 6 pointed out that:

“[...] a lot of peoples’ lives are pretty mundane and every day is the same, plodding through, but when you go out and do something engaging and then it’s on the edge and exciting and there’s an adrenaline rush with it”.

Similarly, participant 9 argued that:

“I think that people are looking for a way to engage and challenging themselves and I think [...] most people have to seek adventure and challenges through recreation and so, their day-to-day life does not provide that anymore”.

As such, one begins to understand the attraction to these parks. Participant 17, for example, also argued that:

“I think that’s [thrill seeking] definitely a huge part of it [...] I think, you know, putting yourself in a position where there is a perceived amount of risk, but you’re comfortable enough with the systems to trust that they work, that’s kind of a best of both worlds situation”.

Further, when asked about this paradoxical relationship with risk participant 6 pointed out that:

“...that’s probably where its magic is, [...] So, the idea would be ‘perceived risk’, is a term that people use, it’s perceived as being risky, but, the truth is it’s not risky”.

Similarly, participant 5 argued that:

“... there’s a perceived risk that brings out the desire for, you know, that little bit of thrill-seeking that everybody has. So, it seems really scary and really exciting and, and really out there, when really your risk is well mitigated”.

Nevertheless, participant 8 cautioned of the link between the perceived risk and actual risk:

“... I think that the danger part is, you know, perceived versus real [...] nobody wants to be... experiencing, um, real danger. [...] Um, but any time you climb something you are at risk of falling”.

From the data it appeared that the perceived risk is key to the activity. However, clearly there’s a fine line between perception and actual risk and the latter does indeed exist. Nevertheless, it would seem that humans have an appetite for adventure, perhaps an increased appetite due to our risk-averse lifestyles today, and as a result activities like aerial adventure parks are immensely popular. Interestingly, though, some participants spoke of there being no risk or very low-levels thereof and others spoke of an inherent risk. It would seem that, depending on the effectiveness of risk management policies and procedures in place, there will always be some risk involved, but compared to other adventure sports, such as rock climbing, it is much more hidden.

5.1.2 - Defining risk

Given the atypical relationship with risk in the aerial adventure industry, it perhaps should not have been surprising that some participants struggled with defining risk. Yet, an interesting pattern occurred to the point where some participants went quiet for a while as they tried to define risk. Nevertheless, an exact definition of risk appeared difficult to reach, appearing more as a hybrid between inherent and perceived risk. Participant 14 described risk as “a dare”, “a positive” and “negative” for aerial adventure parks.

Participant 17 defined risk broadly as:

"I think that, maybe, perceived risk is [...] a phrase that I would use [...] They're paying to do this service, because, somewhere in the back of their minds, I think, they know that it's safe".

According to participant 4, they too look at risk from different angles:

"[...] we, we sort of look at inherent risk as, sort of, the basis, and then there's the perceived risk beyond that. [...] we look at inherent risks and that is the things that exists with that, if you were to eliminate would change the activity or render it not same thing".

Further, participant 15 also pointed out the different viewpoints of risk in the aerial adventure industry, referring to both inherent risk, but also viewing it as a dare:

"I mean, it's, it's completely a dare, but I think risk is inherent in this activity in general".

Similarly, participant 5 argued that:

"[...] because we put people who have a minimal experience, minimal training at height, we're putting them at height and allowing in, in an aerial adventure park, where it's challenge course-style elements and they're self-facilitating... that is actually where the perceived risk and the actual risk both, kind of, start to balance out a little bit".

Participant 12 commented that:

"In our industry, it's perceived risk. [...] it's that perceived risk that makes it exciting and that's the selling point for us. So, risk itself, is any activity, or probability that has an uncertain outcome".

It would appear from the interviews that the paradoxical relationship with risk in the industry also made a clear definition on risk difficult to achieve. Nevertheless, perhaps a traditional definition, positive or negative, is not suitable. Whilst, there is an inherent risk, the data shows that, to a certain extent, it is mainly a perceived risk. It would seem that without this perception there is no aerial adventure activity, or certainly not a sustainable

one. This is what attracts people to adventure. On the other hand, in the case of aerial adventure parks, perceived risk is managed risk. The actual risk has been mitigated to create a perceived risk and as such effective risk management becomes key.

5.2 - What constitutes effective risk management?

5.2.1 - The challenges of effective risk management

In an activity where the intent is to keep actual risk an illusion, effective risk management becomes vital. However, this has a number of challenges. Given the constant growth of the industry, stakeholders are doing their best to differentiate themselves from their competitors. Whilst this is undoubtedly an attempt to maintain individual short-term sustainability, it would appear that it also presents the industry, as a whole, with long-term concerns over how to continuously achieve effective risk management. For example, to differentiate themselves, stakeholders are demanding “bigger and better, faster and crazier!” according to participant 8, who described some of the challenges of achieving effective risk management:

“Some of the key challenges we face are when people want to be bigger and better, faster and crazier! [...] and a lot of times, designing something bigger, faster, longer and higher takes you to the edge of the engineering realm as well”.

Similarly, participant 4 pointed out that:

“designing rides and activities, as people want things to get faster and higher and longer and crazier [is a challenge] [...] then there is more inherent risk and so, building these bigger, faster, more fun systems, also requires you to somehow then manage those risks and that’s a challenge when the industry is growing faster, sometimes, than the technology”.

As such, the demand for constant change has become a concern to some within the industry. Participant 3, for example, argued that such is the current demand, that fewer accidents may happen, but when accidents do occur the severity will be much worse:

“You know, the challenges as we become more of an amusement park-type device to the people that are looking at it [regulators], is that the problem is that [...] what we’re doing is we’re saying it’s safer, but to balance it out we’re having to go ahead and make it more thrilling and more exciting and bigger and further and faster. And ultimately I think what’s going to happen is that we may see fewer accidents, but the accidents we do see are going [...] to be catastrophic”.

However, this type of demand does not present the only challenges to effective risk management. Indeed, according to participant 7, a number of challenges exist for industry stakeholders to achieve effective risk management, again, also referring to the paradoxical relationship with risk within the industry:

“[...] on the part of the operator, you know, it’s all about managing that risk and mitigating that risk through proper use of equipment, the risk design, staff training, education, following standards, all of those elements, because, you know, certainly within the activity that carries an element of risk, there’s the threat for the possibility of injury or even worse”.

Similarly, participant 1 argued that:

“[...] there’s so many different areas of risk in these operations [...] you’re putting your customers up 60 feet in the air. So there’s a risk in trusting all of the equipment [...] that the customers are going to follow the rules. So, there’s the safety risk of just the natural, the natural height that are involved. But, then it also trickles down to the risk that, [...] you’re dealing with young kids basically, that you’re trusting to take care of your customers. So, what you put in the training them and the time you spend with them [...] because, [...] there’s a huge risk, that the safety isn’t in the equipment, but the person who’s running the operation”.

From the data it would seem obvious that a number of challenges exist to achieving effective risk management. With a booming industry, stakeholders are trying to differentiate themselves by building parks with bigger, faster and crazier facilities, such as zip lines. Such demand puts pressure on various stakeholders in the industry, in a number of ways, to ensure that the demand is delivered, but in a safe manner. The answers to these challenges do not appear in the data, but one can imagine that with the industry, apparently, growing faster than the technology this causes many concerns. The data would seem to indicate the challenge lies in turning actual risk into perceived risk, a task that

involves many layers of risk management, such as staff and participant training, communication, proper use of equipment, design and following standards.

5.2.1.1 – Aerial adventure park: an amusement ride?

What is becoming obvious from the data is that perception, be it from the public agency-side or the participant-side, also creates challenges to effective risk management. Once more, this links back to the argument of participants wanting a thrilling, but ultimately, safe experience. The few states that do regulate the industry tend to class it as an amusement ride or carnival ride, see participant 10, 13 and 14 transcripts, for example, which is, perhaps, not a classification the industry concurs with. For example, the personal growth referred to by participant 7 is, perhaps, not as evident, if at all, in traditional amusement ride activities, such as rollercoasters. Some interview participants argued that the two activities are vastly different. For example, participant 11 commented that:

“[...] an aerial adventure park is, you know, you’re interacting, you’re sweating, you’re moving, you’re actively moving between elements [...] I mean, in a carnival ride, you have, you’re sitting there. Like, you’re not supposed to move!”

Participant 12 was facing government regulation in their particular state and was concerned whether aerial adventure parks would fall under amusement rides, which could increase the challenges of risk management. The participant commented:

“This really isn’t an amusement ride, it’s more of an independent sport [...] the participants have to use their skills and their training to get that experience and, and to go through an experience as it was intended.”

Indeed, participant involvement seems to be the differentiator between aerial adventure parks and amusement rides, a point also made by participant 17:

“Aerial adventure parks are, I think, a bit more challenging and a bit more involved. [...] because there’s the amount of independent play and exploration and, as I mentioned, often times, people are clipping themselves into belay cables and transferring from element to element”.

Further, participant 5 described the difference:

“[...] most of those [amusement parks and carnival rides], once the ride’s built, you, you teach the guy who, whatever his level of education might be that you, you hit the green button to turn it on and you hit the red button to turn it off, and if something really bad goes, you hit this button and pull this lever and that’s it. And so, to transfer that over to something that has, that has such a guide or monitor driven, or facilitator driven role, and traditionally always, we don’t just put people out there to push buttons. They’re, they’re there. They’re responsible for a lot, including some higher-end rescues”.

The data indicated that some perceive aerial adventure parks in a similar light to amusement rides, which, in turn, brings challenges to risk management. Indeed, with perception playing a key role, if accidents are getting fewer but worse, this could potentially create a perception issue. Participants are, likely, expecting an amusement ride-like activity, not necessarily considering the inherent risk. Further, according to the data, the main differentiator between the two is the level of participation required from participants at aerial adventure parks. Indeed, participants are, to a certain extent, responsible for their own safety, particularly, if smart belays are not used as participants are therefore capable of unhooking themselves from the belay system. It would also appear that aerial adventure park staff have more responsibilities than those of amusement rides in the sense that the former are also responsible for rescuing participants off the courses.

5.2.1.2 – The People V. Aerial Adventure Parks

According to the data, the participants and their level of participation as well as the park staff themselves provide major challenges to risk management within the industry. Participant 15, for example, described it as the main area of concern in risk management, arguing that “that’s definitely the one that jumps out at you the most”. Participant 9 commented on the challenges that participants bring to effective risk management, arguing that such challenges make the activity inherently different from traditional amusement rides. Yet, participants expect an experience similar to a rollercoaster, a point also linking back to the previous section. The participant stated:

"[...] they [the participants] have far more control of the experience on an aerial adventure than they do on a roller coaster. So, I would say the most difficult aspect that we deal with, from a risk management end in our aerial adventure parks, is the participants themselves [...] there's a component of the safety that relies on the participants themselves that they may or may not fully understand".

Further, participant 12 also spoke of the challenges of dealing with the human factor in risk management:

"Yeah, I mean, the human factor, you know, it can more than quintuple the, the danger."

This concern was echoed by participant 17 who stated that:

"I think that, at the end of the day, we can build things, we can try to mitigate as many risks as possible, but the riskiest things that we will do is play with each other".

Like participant 17, participant 18 spoke of the challenges that the human factor brings. Regardless of the amount of training participants go through, it seemed that participants were still capable of complicating matters:

"[...] the things that we have had happen, the most serious of accidents have been, you want to say serious, is, you know, um, not following directions."

Further, participant 3 argued that:

"If you tell people this is dangerous, the type of people that are going to be drawn to it are going to accept those risks. If you tell people that it's an amusement ride and it's safe, the type of people that are going to be drawn to it are people that [...] are going to be much, much less willing to accept the fact there is risk in what they're doing".

Thus, participant involvement appears to be key to aerial adventure parks, though it also clearly presents the industry with challenges to risk management. Participant 11 indeed defined it as such: *"the biggest risk are the guests breaking the rules and having an, an accident"*. Similarly, participant 6 argued that the human factor plays a key role:

“I mean, it’s very rare that the structural failures are designs. Almost always [...] where you see a big portions of the accidents and, and injuries and deaths out there is [...] not just user-based, but, [...] staff or somebody’s made a mistake”.

Nevertheless, according to participant 4 these differences are slowly being eradicated due to the demand for safer experiences, a development that appears to be creating challenges to achieving effective risk management:

“[...] it’s a challenge, because, if you, if you have a human element, it’s hard to manage that risk, because you can’t control people’s every move and every behaviour [...] the biggest challenge now is, because, people have hurt themselves, being involved, the industry is becoming more, more risk averse [...] So, it’s turning more into, like, um, a passive experience, more of like a rollercoaster-situation”.

Participant 15 made a similar point:

“I think it still plays a significant role [the role of the participant], but I think it is a changing role. It is transitioning. [...] now, with the increase in innovation and technology, it’s not so much built off human interaction, because you’ve got the smart belays. [...] I still think [...] participant perception that plays a huge role on the risk management-side of things and that’s where I think it’s the operator’s, [...] to [...] manage their perception”.

Further on from section 5.2.1.1, the data suggested that the level of participation taking place among participants also provides a great challenge to effective risk management. Indeed, the interview participants seemingly alluded to risk always being present as long as humans were involved, due to human error and participants choosing not to follow the rules. This has, in turn, resulted in the industry becoming more risk averse and the activity apparently moving towards a more passive experience, similarly to rollercoasters. If this shift continues, it may indeed be accurate to consider the two activities as one, or at least very similar. The previous section argued that the aerial adventure industry was different to amusement rides due to the level of participation. It now seems this differentiation may be less so going forward.

5.2.2 – Training to prevent

If risk management is key to aerial adventure parks, it would seem that the impact on participants need to be managed, though this is no mean feat. Training and education of participants and staff was a recurring point of discussion throughout the primary data. Participant 5 referred to its importance in achieving overall effective risk management:

“[...] the easy way is to try and educate. [...] otherwise creating competency in staff [...] they’re daily going in and managing that risk”.

Participant 1, for example, referred to the importance of effective staff training and the impact it has on the rest of the organisation:

“So, what you put in the training them [staff] and the time you spend with them and follow up on training and the staffing. [...] then there’s a huge risk that the safety isn’t in the equipment, but the person who’s running the operation”.

Participant 4 outlined the extensive training their staff go through and its importance:

“[...] so we have an entire training programme that our staff go through. [...] they have an initial training and then they have ongoing audits that’s done [...] we’ve got safety meetings, we’ve daily safety meetings [...] so it’s kind of an ongoing process for us”.

Likewise, participant 17 also spoke of the recurring training their staff undergoes:

“Our trainers have to be certified yearly, our facilitators have to be certified yearly per ACCT standards, but also in things like CPR. And then our builders, we have an on-going skills verification check-sheet that we, kind of, monitor as the year goes on”.

Further, participant 9 spoke of the importance of having well trained staff, whilst also providing an example of what recurring training might involve:

“That’s, to be honest, that’s the most important. I mean, if we don’t do a good job of training the front-line staff to do their day-to-day jobs and tasks as well as give them the skills to be able to make good judgement calls in a situation”.

Participant 12 spoke of the participant and staff training taking place at their park, whilst also commenting on the importance of it:

“We do about a 40 minute [...] harnessing and training session and let them practice. [...] we make sure that all of our rescue and park employees go through a 40-hour training and certification program that proves that, one, they can do it and they have the confidence, and, two, you know, that they’ve actually certified and tested that they are capable”.

Referring to the aforementioned participant training, participant 12 further commented:

“So we do our best to explain to them in their harnessing and training, what the risks are [...], but it takes the climber’s cooperation to use the system as it was designed”.

Participant 9 also spoke of the importance of training and preparing participants for the activity:

“[...] there’s a component of the safety that relies on the participants themselves that they may or may not fully understand. [...] And so that’s we do try to mitigate that with training and direction, um, and then we try to also mitigate that through observation and correction on the course”.

As such, the data suggested that effective communication between the park and the participants is vital to manage the human factor of risk management. Participant 15, like participant 12, stressed the importance of educating and managing perceptions:

“There’re a number of ways that you can do that [manage human factor]. The first thing is having educational signs, [...] the second, kind of, way you manage expectations and perception, is the person checking you in. You can tell when someone is not in the right element, from a participant”.

Essentially, the industry is seemingly putting much attention to the training and education of its staff and participants as a way to manage the risks facing everyone involved in it. As such, it appeared a rather comprehensive approach, involving first the education and training of staff, who in some cases are certified, and they are then expected to transfer their knowledge to participants. Seemingly, the education and training of participants provides the industry with its key tool of managing the perception issues currently existing. However, it was acknowledged that having mainly youthful staff also represented a challenge as a lot of trust is being placed on young people with potentially serious

repercussions in case of an accident. Nevertheless, once again, effective communication is critical in the management of risk.

5.2.3 – Talking risk management

From the interviews it became apparent that communication plays a very important role in effective risk management. It appeared that effective communication need to take place from the bottom of an organisation and all the way up to the top to enable management to make the right decision and thereby achieve effective risk management. Participant 1 spoke of the importance of communicating with their staff:

“What could we do to constantly be improving and never be satisfied that we have everything covered?”

In a similar fashion to participant 1, participant 17 commented on the need for various players to communicate effectively to achieve effective risk management:

“Communication between all these people [various stakeholders] in a transparent documented way [...] is the way that we mitigate the most”.

Participant 14 also commented on the importance of communication:

“[...] making sure that the training’s going on, that they’re communicating with the patrons [...] that’s about the only way that we can impact the patron is through information”.

Indeed, to participant 6, communication seemed key to effective risk management, starting from the bottom and all the way up to the top:

“We have documentation and we have meetings and there’s an inspection of the course and there’s a review of the program every day and that just builds up that amount of information. [...] how we mitigate and deal with that kind of concept of risk [...] is communication and documentation and then delivering on that, right?”.

The importance of effective communication was also stressed by participant 20, who also stressed the importance of industry-wide participation:

“[...] communicating and listening. [...] getting out there and, and having listening sessions and having all the industry participate in a lot of these kind of things over time”.

Participant 5 also stressed the importance of meetings, explaining that risk management is a subject at every meeting at their organisation:

“It, it starts at the very beginning. [...] every meeting we have there’s discussion of risk management. I think it’s the heart of what we do. It’s the most important thing that we do”.

In a similar way, participant 14 also spoke of the importance of effective communication and the impact it has on enabling everyone to do their jobs:

“We started having quarterly meetings with the group [...] and then we actually started having summits with the industry to bring them in [...]. So, we have a pretty good open line of communication”.

Further, participant 17 also spoke of how their organisation’s infrastructure encourages communication and how it has improved risk management by getting ahead of potential issues, thus ensuring the potential never becomes reality:

“So we have a safety committee [...] so the committee meets once a month and brings up all these different concerns [...] where we decide what to do about it. So, for example, [...] the project manager, said “hey, we don’t have any AEDs” [...] and so the, the project manager documented that [...] and then we met last week and now we’re in the process of purchasing AEDs”.

Similarly, participant 9 spoke of meetings held at various levels within the organisation:

“[...] we have [...] bi-weekly [...] best practice meetings. [...] we have weekly safety messaging that goes out throughout the season. [...] And then [...] they do morning team meetings, um, communication, they do weekly management meetings, um, and then they also will have the ability to do a couple of special meetings”.

Indeed, from the data, one got the impression that the knowledge residing within the organisation was key to effective risk management. In order to tap into that knowledge, many participants had an open-door policy. This was, for example, the case with participants 10, 9, 17 and 5. Further, participant 12 said that:

“Well, I think it’s [staff knowledge] critical. I mean, they’re the ones that are making all the key observations [...] so getting that information is critical”.

Participant 5 also argued that getting a hold of this knowledge was important to their organisation and therefore they were prepared to go to some lengths to get it:

“So, we have regular feedback sessions, [...] and then with our operations, they do a morning briefing and generally do an afternoon briefing”.

Similarly, participant 9 spoke of the importance of that knowledge:

“That’s the most important. I mean, if we don’t do a good job of training the front-line staff to do their day-to-day jobs and tasks as well as give them the skills to be able to make good judgement calls in a situation”.

Participant 11 also spoke of the importance of staff knowledge and the impact it may have on future decisions at their organisation:

“Well, it’s, um, it’s the most important stuff. [...] They’re the ones that know how the guests are feeling”.

Participant 13 spoke in a similar way of the importance of staff knowledge, particularly in regards to the front-line staff:

“Yeah, the inspectors, they’re like the first line of people and they’re the first ones to notice when there’s a problem”.

As such, it would appear that without effective communication it is seemingly impossible to achieve effective risk management. Without it, for example, it is likely that participant 17 would have gone to a remote location without AEDs, which could have resulted in a very bad situation. Similarly, through communication staff are made aware of what to look out for, or course designers are able to solve complex design issues, which it is now known is a concern within the industry. Looking at the importance of communication, it also became apparent that the knowledge within an organisation is what assists in achieving effective risk management. From the data, one understood that the sharing, communicating, of knowledge within the organisation helped them prevent incidents and accidents. Interestingly, for larger operations it may be necessary to create a committee to achieve effective communication, due to the size of the organisation. Finally, through communication, equipment is used properly and with an ever-changing landscape of equipment in the industry, this is key.

5.2.4 - Culturally embedded risk management

From the interviews, it became clear that to many stakeholders within the industry, risk management is so important that it has embedded itself in the culture of some organisations. Participant 4, for example, commented:

“I think it’s [...] part of the culture. If you [...] cannot be a good risk manager, above any other quality, it’s going to get you fired faster than anything else, because it’s, it’s the basis of everything”.

Similarly, participant 9 spoke of how risk management is key and starts from the bottom, with the front-line staff, and goes all the way to the top:

“Yeah, I think, [...] we’ve tried to create a culture of safety within our staff. [...] we call it, ‘doing right’, um, and ‘safety first’. [...] I would say that, um, our corporate culture is very strong, um, all the way down to our front-line staff members”.

Further, when asked in regards to the risk management’s relation with organisational culture, participant 17 replied:

“I like to believe that people are extremely comfortable presenting any concerns [...] that there are channels that they’re [staff] aware of and comfortable with for them to feel empowered to [...] bring them up to the, the safety committee”.

According to participant 8, risk management’s relation with their organisational culture means that they set certain standards for whom they work with and what projects they take on-board:

“I think good impact on the culture of our department. [...] I don’t think we want to be known to for just putting our stamp on anything or putting our blessing on anything”.

Indeed, participant 15 argued that risk management should be the number one focus for anyone in the industry:

“I think it’s, it’s got to be the number one thing. If you’re not managing risks correctly, you will not be in business for long”.

Participant 4 made a similar point, illustrating the impact of risk management on their culture, when commenting that *“we joke that they get hired as, like, guides or installers or trainers, but their real, hidden title, is risk manager”.*

For participant 5 risk management is everything within the organisation and thus an important aspect of their organisational culture. Participant 5 stated:

“The main thing that we have that goes on, and it’s kind of our catchphrase, and it’s, “anyone in the company can say stop”. [...] I think that’s actually the heart of risk management for everything is creating that culture”.

Many participants found that by creating an open culture, allowing anyone to come forth with issues or concerns, in regards to risk management that this too helped ensure that risk management was more effective. Interestingly, the slogans were very similar between the different organisations, be it ‘doing right’ or ‘anyone can say stop’. The data would seem to indicate that in order for these companies to be as successful as they are, they’ve had to instil that culture of anyone can say stop, knowing that it, in turn, may prevent incidents and, or, accidents.

5.2.5 - Innovation: A blessing *and* a curse?

During the process of gathering data it became clear that innovation presents opportunities and challenges in regards to improving risk management procedures. For example, technological advances in areas such as belay systems have improved risk management procedures by providing, essentially, a safer experience for the customer. These newer products are called Smart Belays. These were often the first reference point during interviews when discussing innovation and risk management. Indeed, several discussions left the interviewer with the impression of a very dynamic industry, ripe with innovation. For example, participant 7 described the industry as:

“[...] a very dynamic industry that seems to be evolving and changing, you know, the technology, the gear, um, the design, all of that”.

According to participant 1, this description is indeed the case:

“[...] equipment has changed so much and it’s rapidly changing now. There’s just so much more technology that’s being brought in. Like, the traditional ropes course, there would be lobster claws. [...] And now, it’s evolved to you have auto-locking lanyards. [...] and there’s continuous belay systems, so there’s never a transfer”.

In fact, with the constant demand for “bigger, faster, longer and higher” experiences stakeholders are finding that they’re constantly having to improve their tools to continuously deliver. Participant 8, for example, developed a tool that has enabled the company to design zip lines more efficiently. However, the participant also commented:

“[...] every time somebody comes to us for something bigger and faster we find some component of the calculator that we built, that now needs to be upgraded to consider something else. [...] the [intentionally left blank] can be correct for a zip line if it was going in, in Texas, but can be lacking in code compliance if you used the same tool in California”.

Further, participant 17, for example, mentioned that:

“[...] there’s also advances in the industry in terms of the equipment that our clientele are using that we provide our participants”.

Participant 15 also commented in a similar vein, when asked how innovation has affected risk management within the industry, whilst also referring to the smart belays:

“In general, in a positive way. Um, and mainly what I’m referring to there is the technology in the smart belay systems. I think innovation has made the industry safer, especially whenever you’re sending through these large throughput commercial operations”.

Indeed, according to participant 16, the industry has undergone major changes, through innovation, during the past few years:

“[...] Now, with our courses, we put the harness on, we put them on the track, we say “no running and one person on the element at a time”. [...] back in the day, some manufacturers used to tie their harnesses out of webbing”.

As a result, not only has this innovation made the industry safer, the introduction of the smart belay has also had a financial impact on operators, as participant 15 mentioned their company offers lower insurance rates for operators that invest in the smart belay or continuous belay devices. Essentially, it appears the smart belays have taken a major focus off the shoulders of operators, freeing staff from watching every ‘transfer’, allowing them to focus more on the overall operations. The introduction of this equipment has also

removed some of the risk of human error as participants are no longer able to unhook themselves on the courses, an issue that has caused incidents in the past as mentioned in the literature review. Further, innovations do not simply improve risk management aspects of the operations, but also enables the industry to continuously feed the demand for “bigger, faster, longer and higher”. When queried about the innovation taking place in the industry participant 1, for example, commented that:

“[...] that really is adding to the uniqueness of the industry [...] they can have a really unique and really awesome attraction whether it’s a zip line, a freefall or some kind of a ropes course challenge”.

Similarly, participant 16 described how their company is constantly adding new elements to their experiences to feed demand:

“[...] we’re always under the gun to develop new elements. We developed 25 new ones last year, we’ve got 25 new ones this year, coming out”.

As such, innovation has, in this case, improved the industry. However, innovations, such as the smart belays, also come at a financial cost and not all are willing to make this investment just yet. For example, participant 11 argued that:

“[...] I think that if the aerial adventure course becomes too technical and too expensive, a family will just opt out and just go and do something else”.

That type of mind-set is a concern to others within the industry. Whilst innovative products that improve risk management procedures may be available, it’s of little help if people aren’t buying into them. Participant 1 pointed out:

“[...] there’s still a bunch of courses who aren’t making that investment in [...] this smart belay technology [...]. But, any of the auto-locking or continuous belay systems, they are significantly more expensive than just that traditional lobster claw [...] to me it’s frustrating to see, because I see that as really a danger to the entire industry”.

However, innovation also brings its challenges. Innovation brings change and with change comes the unforeseen, the unknown, which is one of the challenges to risk management. Participant 15, for example, spoke of the constant changes taking place in the industry to

create bigger and faster experiences, relying on innovative new approaches to achieve this. As such, innovation is also presenting the industry with challenges:

“Because this industry in the US is so new and it’s growing so rapidly, everybody is trying to get the next step and do the next thing, the next better thing. [...] but that brings new risks, new unknown risks, because we’re venturing into new waters and territories that we’ve never been to before”.

Participant 15 further explained the challenges of innovation and the ensuing change it brings when embraced:

“[...] any time you’re having to learn a new procedure there is a learning curve there. If you’ve been operating your course for 5 years on a traditional carabiner-system [...] you know the ins and outs of everything, but if you switch to the smart belay system you’ve got different challenges”.

Participant 5 further summed up the challenges that innovation and new technology can bring:

“[...] we can technology our way through most things and it works well, but as soon as you create technology, somebody finds a way around it or it creates another issue in the industry”.

Participant 3 provided an example of how innovation can impact an organisation when it goes wrong, referring to a case where a major manufacturer had introduced a new trolley, the piece of equipment that carries participants on zip lines, the new trolley resulting in incredible failure rates:

“[...] what they did was they created a Track Plus [...] it was a huge shock to people. I mean, I know, we had 80% failure that year on our trolleys [...] It just wasn’t plugged to handling the speed that it had always originally handled”.

Another case, described by participant 18, showed how the good intentions of innovation can have dire consequences:

“We did have that fatality [...] but, it was deemed manufacturer’s defect. [...] So, once you connect in there, on the ground, you can’t disconnect. So, they said, “well, we have zip lines and you have to disconnect, we have to have a patron or an operator up there to monitor

the disconnect, so why don't we", like you said, innovation, "put them on a rail-system that acts like a zip line?" [...] this one gentleman pulled back as he transitioned into the [...] zip line, [...] and when he pulled back, the puck [...] came out the bottom, so he went off the back. [...] So, now they've redesigned it and we finally opened it".

Similarly, participant 19 argued how innovation is also providing challenges to the industry:

"Sometimes the products aren't keeping up. [...] which sometimes has caused accidents. [...] it [the demand for bigger, faster, longer] causes people to use products in a way that they weren't intended to be used and hope that they work".

As such, innovation brings both solutions and challenges to the aerial adventure industry. Nevertheless, it would seem that the invention of the smart belay has had a largely positive impact on the activity, though it has simultaneously presented the industry with dire warnings of how matters can go wrong as well as created a bottle-neck or two. It also appeared not everyone were able to take advantage of new innovative products due to their costs, though the costs in some cases could be off-set against savings elsewhere such as insurance. Perhaps somewhat ironically, the issues caused by innovation seemed to have been solved through further innovation. Indeed, innovation also appeared to present the industry with new unknown risks, thereby creating a never-ending cycle of need for innovation. However, with demand growing at a rapid pace, the industry seemed to struggle to keep up and perhaps seeking quick solutions as a result. Unfortunately, this in turn has caused issues as products, at times, have been used in ways they were not intended originally. Overall, though, according the data gathered, the activity is safer with the smart belays than without it, though not everyone seems to be in agreement.

5.2.6 - The importance of leadership

The importance of leadership and its impact on risk management was widely commented on during the interviews and it appeared that without effective leadership effective risk management is not achievable. For example, when asked about the role of leadership in achieving effective risk management, participant 6 commented:

"Well, it's everything isn't it?! [...] the general public isn't really that smart. [...] And so, all that stuff has to be managed [...] all the way down through the chain of command".

Similar to participant 6, participant 8 spoke of the challenges of leadership:

"I'd say it plays a pretty big role as a concept [...] and I don't think just anybody can do that. You have to be a pretty confident leader that knows what you're getting into, and you have to be able to convince [...] the jurisdictions".

Participant 11 argued that managers essentially set the standards that the rest of the organisation follow and as such it all starts with leadership:

"I think that most of it has to do with being a good example. [...] but there is also a way to communicate with the staff and communicate with the guests so that [...] we're not just shouting at them, that they're doing something dangerous".

In a similar vein, participant 16 argued that leadership is about providing a vision for the organisation and ensuring that the team has the right tools to succeed. As such it would appear key to achieving effective risk management and everything else in the organisation:

"[...] you set the vision and then you set them out on their path and then you constantly repeat your vision over and over and over. You make sure [...] your employees have all the tools they need to do their job [...] if you give them sufficient support [...] your company is just going to go in the right place [...] leadership is everything".

Participant 12 also described the importance of leadership in a similar fashion to participants 11 and 16:

"I think leadership's important, because you set that tone with leadership and what the expectations are and it shows your adherence, as an organisation, to a standard [...] that's critical".

The aforementioned importance of achieving effective risk management through the right culture is not possible without the right kind of leadership, according to participant 9.

Participant 9 argued that senior management is responsible for ensuring that culture is in place:

"I think the front-line staff is your first line of defence. [...] I would say it's us managers and the senior managers on site that really create that culture, um, that helps the front-line staff feel empowered to make the right decision".

Likewise, participant 17 spoke of the importance of leadership creating the right culture:

"I think it's [leadership] huge. [...] I have worked for companies before in a build context, [...] it felt very much like, "you should know how to use these tools and if you don't, it's, kind of, your fault". [...] I think we have done everything in our power to cultivate the opposite".

Finally, participant 15 spoke of the power of effective leadership in getting people to follow and thereby achieving effective risk management:

"Leadership is huge, [...] if you're a very effective leader then people want to do the right thing for you, they want to work with you".

The data seemed to indicate that leadership is another essential layer to achieve effective risk management. It creates the culture, another aforementioned key layer to effective risk management, and it sets the standards that the rest of the organisation adheres to. It would appear that without effective leadership, the process of achieving effective risk management, therefore, falls apart.

5.2.7 – Combining standards

From the primary data it appeared that some participants felt the multitude of standards provided a hindrance to effective risk management, due to the different understandings of the standards as well as the costs of keeping up with all the standards, thus presenting an issue for an industry largely dominated by SMEs. For example, participant 5 commented that:

"It would be really nice [if the standards were combined] [...] it's a discussion that comes up all the time [...] both the ACCT and the PRCA, even though they're so harmonious with ASTM, they're written a little easier for lay people to understand. [...] I think our annual budget for stand, standard purchases is something like \$10,000, \$15,000".

Further, participant 10 argued that such a combination would be beneficial to the industry:

"Yeah, I think it is always helpful when there's just one. [...] we want to allow for some choice and then figure out which one [standard], [...] is the primary or referee standard".

However, whilst it seemed that participant 10 preferred the ASTM standard they also allowed for the use of the ACCT standard, though the participant pointed out that at some stage, if the standards do not combine, that particular state may opt to stick with one standard and only accept that particular one:

“Yeah, as we gather information and if we see that there’s better consistency [...] it’s likely that we might go to one. And, usually, our preference is the ASTM standards. Those are more international”.

Participant 20 also argued for the combination of all standards, arguing that it would help bring the industry closer together, rather than split into different camps and also pointing out that not all stakeholders are equally represented on some of the standard-writing boards. When asked whether it would be beneficial to combine the standards, they replied:

“Most definitely. Because, I think all of us have a significant role in that standard and I think [...] you need to get a group of people that is with relative equal representation developing standards. It can’t just be industry people. [...] Not a lot of the players are playing in the same sandbox or want to play in the same sandbox. And that’s unfortunate”.

Participant 7 saw some benefits in combining the standards, but argued that much of the confusion currently existing could be eliminated through better education:

“You know, I think that would make it easier on the end-user, because a lot of people still are very confused about, not only, what standard they should be following, but the differences in the standards, and even in, in interpreting the standards”.

Indeed, both participants 4, 8 and 17 commented on the confusion that participant 7 spoke of. Participant 4, for example, commented that:

“Standards are subject to interpretation and so, [...] an interpretation on a standard has caused companies to have to put something in place or show compliance in a way that I just don’t think was ever the intention, and then that snowballs to other people imitating that behaviour and then suddenly you’re not doing the standard”.

Similarly, when questioned whether they found that some standards were left open to interpretation, participant 17 argued that:

“Certainly. Some of them are pretty straight forward, but a lot of them the standard will say, “Provide a commissioning report”, but what that looks like, how it’s delivered, a lot of

that is up to interpretation and I think that different people have different ways of doing things”.

Participant 3 also found it beneficial to combine the standards, though they did not find it a likely reality:

“It’s something that I’d like to see happen, but I, I don’t think it’s the reality [...] I think in terms of ACCT and ASTM, yeah, we’re going to see a lot of collaboration between those two. There are several overlaps in the two, but [...] both parties have their own memberships and reasons for doing what they’re doing”.

On the other hand, other participants felt that the issue was not with multitude of standards available, but mainly with the understanding of the various standards, a point made by participant 4, for example, who also spoke of the issue of simply focussing on compliance rather than taking it a step further:

“It [one standard] would be so hard to write, there’d have to be so many caveats [...] for us, the bigger challenge is having a way to support regulators and permitting agencies and insurance companies to understand, and operators, what the standards are and then hold people accountable to the standard”.

Participant 17 spoke in a similar vein to participant 4:

“I think it’s nice having different standards and not combining them all into one, because I think there’s, um, I think it’s too much for one set of standards”.

Whilst the data presented some disagreement over whether to combine the standards or not, it was an issue that came up during the interviews on a number of occasions. Indeed, some of the interview participants believed the combination would be a mistake, leading to standards being too complex and too large. It seemed some interview participants preferred the multitude of standards as the current situation avoided a number of caveats. However, the primary data also seemed to suggest that much confusion could be eradicated by combining all the standards, particularly bearing in mind the standards appear up to interpretation and thus the cause of much confusion. Indeed, it seemed that

some friction existed within the industry due to the number standards currently available, with some stakeholders 'picking sides' or not playing in the same sandbox. As such, one could deduct that perhaps in order for the industry to achieve industry-wide stakeholder collaboration, the standards would need to be combined to bring all stakeholders together. However, it appeared that ASTM and ACCT were already collaborating on some issues, which in turn, may pave the way for a combination of the standards.

5.2.8 – Effective risk management; a holistic approach

With the information from the previous sections in mind one can begin to fathom how complex the path to effective risk management is. For such a complex task, it would appear that an all-encompassing approach is required. Indeed when asked what effective risk management looks like to them, participant 7 replied:

"I think it's, it's a really comprehensive approach that touches on all facets of the operation. [...] So, I think it's really, it's a very holistic approach that touches on all those different elements".

As such, one can imagine a process that's never-ending. Participant 1, for example, expressed their thoughts on effective risk management:

"Um, never being satisfied. [...] you could never have your bases 100% covered. But what you could do is always be proactive [...] find anything that could be improved.

Participant 4 described effective risk management in a similar way:

"I think it's everything. [...] we have to demonstrate it, we have to role model it, we take it very seriously. We hold our managers to a higher risk management standard, they go through additional training, we have entire plans that they're responsible for, from a risk management standpoint, and emergency plans, incident responses".

To participant 9, effective risk management constituted a process involving layers and many different players. Participant 9 described effective risk management as:

“Accidents don’t happen due to one single failure. Accidents happen due to a series or chain of failures [...] I see effective risk management as layering procedures and protocols in place that creates a layering system, that protects and monitors those policies and procedures”.

Participant 3 argued for the inclusion of third parties to achieve effective risk management:

“[...] the operator that employs third-party reviewing assessments tend to do the best. [...] it’s a growing field with a really broad skill-set, with lots of new technology, lots of information that’s not readily shared and [...] the more perspective people get on risk management [...] that’s probably the key component to a good solid risk management plan. [...] And so, risk management is, for me, a series of processes and procedures”.

Likewise, participant 15 considers third party inclusion essential to effective risk management:

“An ongoing process. A circle that never stops. [...] You’re continually identifying the risks, you’re continually assessing the risk, you’re continually treating those risks and then you’re continually monitoring the treatment of those risks, to see how they need to be adjusted”.

However, third party inspections are not currently a requirement in the industry, meaning that some builders, for example, are able to provide final inspections on their own courses, a point alluded to by participant 3 as well. Participant 1, for example, commented on this as being a potential issue:

“I really like the idea of having a qualified third party do your inspections. [...] not everyone has to do that. So for example, some builders, that constructs their parks, they might do their own inspections. [...] you’re obviously going to be a little bit biased if you’re doing your own inspections”.

According to participant 11 effective risk management involves:

“Consistent adherence to maintenance and inspection, rules and operating procedures and equal enforcement of safety procedures from staff and guests at all times, [...] consistent application of our warnings and good training”.

As such, looking at the data gathered, effective risk management, to a certain extent, almost consumes the organisation. It's a holistic approach, involving everything within an organisation, consisting of various layers, according to the data. Everything that these stakeholders do, they do with risk management in mind. Communication between themselves and with third-parties would appear to be key to achieving effective risk management. Further, the data leaves one with the impression that effective risk management is a never-ending process, a continuous process where one can never be satisfied, partly because of the considerable amount of innovation taking place currently. Bearing that in mind, it also becomes obvious that effective risk management is not achieved by going at it solo. Outside input is required.

5.2.9 – Industry stakeholders' influence on risk management procedures

Whether collaboration is taking place in the industry or not, the interviews seemed to suggest that a number of external stakeholders greatly impact risk management procedures for the individual stakeholders. For example, participant 4 mentioned both the individual states as well as insurance providers:

“Insurance [...] advises us as to what incidences are happening, so then we can then ensure that we have policies or procedures in place to then minimise the risk of those incidences occurring. [...] the regulators [...] they absolutely, 100%, influence what we do, because they are the ones telling us what standards or what policies we have to follow to be able to open to the public”.

Similarly, participant 19 commented on how the state influences their risk management procedures:

“Some states will say that you need to follow ASTM standards, some standards will say that you need to follow ACCT standards. Some states don't care. Some states only care about zip lines. [...] And then, as for ACCT [...] they try to help any state or jurisdiction who wants to develop standards”.

Similarly, participant 17 spoke of the influence of the regulators and the ACCT, when asked how other stakeholders might influence risk management for them:

“Yeah, I know that a lot of the things that we’re currently doing, [...] comes out of different state mandated things and then we usually end up learning from what they want and making it, kind of, meet our needs and then that really grows into something much bigger and useful for our company, [...] So, it all, kind of, influences us, for sure, heavily”.

Participant 5 also commented on how their procedures have changed overtime as new stakeholders have gained in influence within the industry, referring to the growing influence of the ASTM standard:

“I think, the main difference now, and what I see, now that we’ve been doing mostly ASTM-style builds is that we build to ASTM no matter what the jurisdiction requires, because for the most part, both of the standards are very harmonious, the ACCT and ASTM. The main difference is in the operational requirements”.

Similarly, participant 12 commented that industry standards and insurance had the greatest influence on their procedures, whilst also pointing out that their state was likely to introduce zip line regulations in the near future, which would impact their operations:

“It’s [insurance rate] based on, you know, the credentials of your business and the risk and accident record that your business has. The way that we minimise that is to stick to the industry standards and the other thing that helps us reduce our risk with insurance agencies is making sure that we’re documenting all the problems that we’re experiencing and all of the maintenance issues and how they were corrected. [...] No, the state does not regulate the industry, but [...] is starting to gain a foot-hold in it”.

According to participant 11, the state did not influence their risk management procedures, but instead the local county did, though only to a limited extent:

“We’re in a county park, so what we, what our agreement was with them, is that we will operate the park according to the manufacturer’s requirements”.

As such, it seemed that the influence of the public stakeholder varied from state-to-state, with some states heavily involved in regulating the industry, others playing a limited part in doing so and some states playing no part at all. Primarily, it seemed the states were more

focussed on the zip lines than anything else. This has led to instances of state inspectors turning up on site to inspect zip lines, but disregarding the rest of the aerial adventure park in question. However, the main influencer appeared to be the standard-writing organisations, such as ASTM, ACCT and PRCA. Interestingly, one participant spoke of how they would follow both ASTM and the ACCT, with one standard focussing on the build of the course and the other on the operations. It also appeared the two standards were somewhat harmonious. Naturally, the insurance providers also influenced the industry, particularly influencing what standards to follow, thus also representing a type of regulator to the industry.

5.2.10 – An accident and its impact on an industry

Effective risk management decreases the likelihood of incidents and accidents from happening and is therefore, understandably, important for the individual organisations within the industry. However, effective risk management by individual operators also has a wider impact on the industry in general, meaning that an incident or accident can, potentially, have a negative impact on the industry as a whole and not just the individual organisations involved. For example, participant 1 spoke of the wider impact that an incident may have:

“I think it has a significant impact. [...] I think it’s a negative impact if somebody gets hurt on a zip line or hurt on a ropes course. You know, people see the news [...] so, it automatically sticks to peoples’ mind. [...] any injury in the industry is bad for business as a whole”.

Participant 13 also commented on the wider impact of incidents:

“I think it impacts them dramatically. I think that we’re all paying attention all of the time and just, for example, on any other ride that there’s an incident, the first thing we do is say, “do we have one of those?” you know, and then “could the same thing happen on the one that we have as the one that they had?”.

In a similar vein, participant 7 spoke of the many different ways an incident may impact the industry:

“Yeah, well it affects them in a number of ways. One is perception, especially among those who really don’t know. [...] it affects the public’s perception, affects the insurance,

regulation, other operators, so, there's definitely a need, again, getting back to the risk management element, to really ensure to the greatest extent possible, that the risks are being mitigated".

Like participant 7, participant 8 also spoke of the various ways in which an incident may impact the industry, describing it as a trickle-down effect:

"It usually affects the industry pretty deeply and from the industry perspective it mostly perfects it, it mostly affects it through perception, [...] it also causes all the jurisdictions in that area to take a closer look at what people are doing in their area and so it, typically, has trickle-down effect into new requirements".

These concerns were also shared by participant 19 who commented on the power of the individual states and what could happen in the aftermath of an accident. Further, they also pointed out that some states refuse to introduce any regulation until a fatal accident has occurred:

"[...] like in [intentionally left blank], the state does not want to regulate aerial parks or zip lines until there's a death. [...] Well, in certain states it'll [an accident] shut everybody else down [...] Insurance can go way up. They could always put in regulation that's just a huge barrier to operating in the state. [...] That's why a bunch of these states are getting together, all the operators in those states are getting together and getting on the same page".

Participant 6 also commented on the impact and how it may change perception, whilst also referring to the likelihood of regulation following an incident:

"It can be sensationalised, it could be an issue that people have to pay attention to, because, whatever reason, the thing that occurred is maybe a situation that, you know, we all figure out is a real problem that we hadn't realised".

Participant 20 also echoed these concerns, commenting that standards often are reactive:

"[...] typically, standards are developed based on, they're reactive to accidents or potential incidents. [...] So, something bad happens, we're going to do something about it and the standard prevents that from happening again".

Further, participant 17 also spoke of the consequences of an incident:

“Insurance can go up for anyone and everyone if someone gets hurt”.

Participant 9 also spoke of the consequences, commenting that incidents are already having an impact on the industry:

“[...] it’s not that uncommon that incidents happen and then that starts state legislation around that incident, because of the heightened awareness of the activity. [...] we have seen increase in insurance rates across the board [...] and a smaller insurance pool option in the industry, so I think that’s going to be a challenge that the industry, as a whole, has to do and face, because it’s going to possibly make it [unaffordable] [...] especially for the smaller operators”.

Participant 3 spoke of how incidents are having an impact on the industry and the challenges it brings:

“There’s been a big challenge and a lot of contention where there’s been a couple of parks and people that keep asking ‘how is it possible that they’re being insured for this and how is it impacting us?’ [...] ‘And, sometimes it’s in the best interest for us to insure people that we don’t want to insure, because we can be the advocate and the voice in the back of their head that says, you have to change and do things differently’.”

Participant 14 commented on how incidents happening in other places constantly impact how they operate:

“I think if you had a bad accident at one park, it could maybe scare people from going to other parks for a while. [...] They’re very publicised and the news will pick them up locally, and as soon as they pick them up locally, they’re in our office probing us on, you know, how we do things”.

From the data it appeared that the participants were well-aware of the impact one incident might have on the rest of the industry, be it from perception, increased regulatory-oversight and, or increased insurance costs. It appeared that the importance of everyone being safe in the industry was not lost on the participants, whether they were competitors

or not. Somewhat surprisingly, some states had, however, decided not to interfere in the industry until a serious accident occurred, when one would imagine they would want to prevent that in the first place.

5.3 – Stakeholder Collaboration

Industry stakeholder collaboration can provide an effective tool in the continuous development of dynamic industries, as explored in the literature review (e.g. Jamal and Stronza, 2009). With collaboration providing the foundation of this study, the second part of the interviews focussed on industry stakeholder collaboration as well as the extent of current levels of collaboration on risk management.

5.3.1 – Collaborating with industry colleagues

A number of interview participants spoke positively on collaborating, in general, with their industry colleagues. According to participant 5, for example, it provided part of the foundation of their own and the industry's success:

"[...] we have members on ACCT boards and we have some members on [...] the ASTM review committee. [...] we regularly attend different symposiums and gatherings of just the aerial adventure industry and put on seminars [...] it's what makes us successful in the industry and what makes the industry successful as a whole"

Participant 10 described the enthusiastic approach at their state taken to involve the local stakeholders in decisions pertaining the regulations on the aerial adventure industry, an approach that has proved popular with the stakeholders:

"Whenever we do any changes or proposed changes to our regulations, in fact even before that, it starts with our engaging with stakeholders [...] we hold a meeting and discuss. [...] and then we will open our rules and then we invite [...] those that are in the industry [...] and we'll have a lot of open discussion and input and debate".

In a similar vein, participant 18 also spoke of an open-door policy, though perhaps somewhat less formal to participant 10. Participant 18 also spoke of how collaborating with their stakeholders had helped the state prevent risky attractions open up in the past:

"[...] we have a, you know, one-on-one working relationship with them. [...] So, yeah, we, we collaborate that way. We just interact".

Participant 17 also spoke positively of collaborating:

"it's [collaboration] something that I think has its roots in the ACCT organisation in that it was a bunch of people that got together for the purpose of collaborating on best practices. [...] when there's new technologies available in the industry, we'll collaborate on testing them and seeing, kind of, where their uses lie. [...] I know there's a lot of collaboration and communication on what we, as an industry, interpret those standards to mean and effective systems for complying with the standards".

According to participant 8, collaboration was an important aspect of their work, trying to improve their own operation as well as their stakeholders':

"Our biggest collaborative partners, [...] would be [...] engineers [...] and then we collaborate very heavily with the manufacturers that we work with. Our goal is to bring those manufacturers in and make it easy to engineer everything as they move forward with their business".

Participant 9 also spoke of how they collaborate:

"Yeah, we definitely do [collaborate] and [...] so, we're pretty open on sharing our, what we learn and best practices. I think that comes down to the culture of our company".

However, it appeared that a big faction of the industry, for various reasons, did not participate heavily in the industry and those that were most engaged in collaboration were a select group, described by as an "old boys club" by participant 5. Indeed, it was noticeable during the interviews with participant 11 and 12 how limited they collaborate

with other stakeholders in the industry, other than their builder. When asked if they collaborated with others in the industry participant 11 commented:

“With the builder of our park, we collaborate with them on information and some marketing stuff, [...] not too much, because we’re so, geographically, disparate. There really is no competition”.

Further, participant 3 spoke of the large section of the industry not currently engaged in collaboration and its potential consequences:

“I would say in our community, if you look at just the commercial realm, probably 20% of the businesses are active in ACCT. [...] and there’s 80% of people that, if they come once every couple of years that would be great. But, I think as the industry grows, we’re going to find that, if we’re unable to, to bring a larger portion of those people into these network [...] we’re really going to struggle. [...] managing the risk is at play. [...] that’s because people aren’t keeping up with what [...] the prevailing practices are, and mitigating the risks through education, which results in accidents and pay-outs”.

Like participant 3, participant 9 also spoke of the levels of collaboration currently within the industry and how they have changed since the industry turned predominantly commercial:

“I think it’s [collaboration] diminished some with the advent of the commercial operator. [...] I think it’s 50/50 on the commercial operators on how well they’re doing at becoming that collaboration network, [...] it’s becoming more and more common”.

Participant 15 also commented on the lack of collaboration taking place, though pointing out that some do realise its benefits:

“I think it’s getting better, meaning the collaboration within the industry. However, this is still a new industry in which everyone’s protective of their ideas, [...] but I would say [...] the more elite players, most of them realise the benefit of collaboration”.

As such, it would seem that collaboration does take place within the aerial adventure industry, though only to a certain extent and, perhaps, in smaller groups rather than

industry-wide. According to the interview participants, for a number of reasons, it is only a small fraction of the industry is actively involved in collaborating. Nevertheless, it appeared those that did collaborate allocated much time and resources to do so, actively organising industry stakeholder meetings, assisting each other in the understanding of standards and testing new equipment. It seemed the purpose behind collaboration within the industry was learning from each other through the sharing of knowledge and data in the belief that this, in turn, would improve risk management procedures for the individual operations and the industry as a whole.

5.3.1.1 – More data needed

When speaking to the interview participants it seemed as though the industry was suffering from a lack of incident data which may, as a result, hamper decision-making for the individual stakeholders. Unfortunately, it seems some stakeholders within the industry, for whatever reason, are reluctant to share such information. Participant 4, for example, argued:

“Unfortunately, there’s no national database for incidences [...] and then, we’re still not doing it, because of everyone’s afraid that it’s going to somehow going to get them into trouble if they’re tracking that information”.

Likewise, participant 9 spoke of the need for more data and how the lack thereof is currently hurting the industry:

“I think probably the most valuable thing that this industry could use at this time in regards to that kind of safety information, would be true statistical data. [...] the industry is functioning in a bubble of not knowing and not being able to defend itself. [...] that greatly hurts the industry and its ability to know how to improve safety and/or know how to respond to government regulators”.

Further, participant 20 also commented on the lack of incident data being shared, whilst arguing for the industry to become more open:

“[...] everybody is hush hush, quiet, quiet and I think that’s not necessarily a good thing. [...] it takes time for an industry to evolve into being more open with communications. [...] And without that [data], it makes it more difficult for people to learn [...] they kind of sit on their own little island and they hold all that information in”.

In a similar vein, Participant 5 also commented on the need for more incident data sharing and the closed nature of the industry:

“[...] knowing what the risk is, I think, is the biggest thing and I think that’s where we need to be more open and more sharing and it’s not necessarily there, because there’s a lot of builders within all of the different industry groups [...] they started out as rivals and have had 10, 15 year rivalries [...] they can converse, but they hold [...] what goes on in their businesses as secrets. “

Participant 11 also spoke of the need for more data sharing to improve decision-making within the industry. It seemed that the participant was arguing such information would help improve operations throughout the industry:

“[...] if there was a little bit better sharing of information from manufacturers and, or, the insurance companies about the reality of any incidences in a fact based way, that would be great”.

Likewise, participant 19 called for more sharing of incident data for the benefit of the industry:

“[...] there’s a lot of people in the industry that wants everybody to share all the accidents and incidents information, like the Mountaineering Community and Outward Bound does [...] right now our industry does not share information about incidents and accidents”.

Indeed, it would seem that data within the industry is so sparse that some participants lacked awareness of how many states currently regulate the industry or how many aerial adventure parks currently exists in the industry. For example, when asked how many states currently regulate the industry, participant 17 replied:

"[...] currently there are two that are pretty involved [...] in the regulation of zip line tours in particular, but I know for a fact that there's a number of other states that are, right now, in the process of seeing what that's going to look like for their state".

On the other hand, participant 15 replied:

"I think we may be up to 7 [states regulating] now. [...] we're still less than 10, I believe".

However, participant 3 had a different number in mind:

"[...] there's only, I think, 13 states right now that regulate zip lines"

According to participant 19, even more states regulate the industry:

"I bet we're up to about 20. I don't know for sure."

As such, it would seem that even basic data is missing within the industry. However, participant 9 argued that the insurance providers have much of this data and, thus, a partnership between the industry and the insurance providers might be beneficial:

"Often times it is insurance companies that hold that data so they can do a better assessment of rates. [...] unfortunately, I think, um, our industry is too fragmented and too diverse. [...] it would have to be some sort of partnership with [...] insurance carriers".

Likewise, participant 15, an insurance provider, spoke somewhat positively in favour of such a partnership with the industry:

"[...] we're pretty proprietary of our data just because I want to use it for the benefit of my clients. [...] but, that's definitely interesting, you know, on whether we would be willing to turn over data to the ACCT. [...] it's definitely something that I'd be willing to consider, that's for sure".

As such, from the interviews it appeared that data sharing is critical to improve risk management procedures within the industry. Participant 16, for example, spoke of how their internal data sharing has improved their operations:

“Any time there’s an injury we get a report and then every year we review those reports. [...] As a simple example, [...] the kids were peeing their pants all the time. [...] the kids were afraid to get out of line and go pee, [...] what we did, [...] we’ve got signs up on all of our ropes courses now that you can get out of line and go to the bathroom and get back in line.”

The data seemed to indicate that more incident-data sharing is required within the industry, though uncertainty as to how this might take place was evident during the interviews. Nevertheless, the need was recognised. Indeed, the lack of data sharing seemed to indicate the struggles the industry currently faces in regards to stakeholder collaboration as the data would seem to depict an industry where the individual stakeholder is uncomfortable sharing sensitive information for, somewhat, selfish reasons, despite the fact that it may improve both the individual stakeholder and the industry as a whole. Participant 16’s example, above, showed how one operation’s predicament might assist the rest of the industry. As such, the data seemed to indicate that the sharing of knowledge amongst stakeholders was key and that the industry needed to open up further.

5.3.2 – The benefits of stakeholder collaboration

Overall, the importance of collaboration for the aerial adventure industry was not lost on the interview participants during the data gathering. Whether they were actively engaged in collaboration or not it seemed that the participants understood and appreciated how stakeholder collaboration may help them individually and the industry as a whole. It appeared that the main benefit of collaborating was the sharing of knowledge. Participant 3 commented on the benefits of collaboration and the ensuing learning it brought:

“[...] one, obviously, is it’s [the benefit is] insight. [...] And, you just really start looking at, you know, your organisation in a very different way. [...] collaboration does that”.

Similarly, participant 6 spoke of the co-learning taking place when asked about the benefits of collaborating:

“You learn from each other. [...] it’s a greater collective consciousness that’s brought to bear on important issues [...] I think the more people with backgrounds and experience that can contribute to the improvements and conversation is good”.

Participant 19 also spoke of co-learning, though pointing out that it does not currently happen industry-wide:

“If incidents are happening on other similar aerial parks, we can learn from it and we can, hopefully, prevent those same incidents from happening [...] what we’ve learned and what other companies have learned can benefit other people and I think there are almost a way that we are obligated to do that. [...] that happens in small groups, throughout the industry, but it doesn’t happen industry-wide”.

In a similar vein, participant 14 spoke of the co-learning taking place through communicating with other stakeholders as a benefit of collaboration. Further, they also argued that collaboration improves relationships within the industry:

“The more knowledge you can get about something the better you are. So, I think it’s important. The communication and collaboration helps, you know, open lines”.

According to participant 2 communication was the biggest benefit of collaboration, thus along the same lines of many of the interview participants. Participant 2 commented:

“The communication is good because it keeps everyone up to speed if there’s an issue that comes up”.

Participant 16 spoke of the importance of collaboration, particularly for smaller organisations that may not have access to vast amounts of data, such as injury-data:

“I think collaboration is great for people that don’t have big data sets. [...] Collaborating is another name for learning, really”.

Participant 17 also spoke of how outcomes can turn out greater through collaboration, thereby improving the industry as a whole:

"[...] whenever there is a standard, there is a bar that we're expected to meet. [...] when we start to put our minds together [...] we end up with something that exceeds the bar and the standard and something that pushes the industry forward".

Participant 18 also commented on the sharing of knowledge and such collaborating has led to improvements in their experience:

"I think that we're sharing information. You know, they're sharing information and give us their ideas [...] we learn something new every day".

Further, participant 9 argued that their organisation had improved immensely due to collaborating with others in the industry:

"For us, it makes us better, [...] Like, it helps us [...] we're trying to reduce costs and improve throughput, improve staff, staffing model, create a better guest experience, reduce accidents. All of that would be realistically the benefits, right? [...] I would say that a huge number of technical innovations have come out from our collaborations with vendors".

Similarly, participant 20 spoke of the improvements collaboration bring, particularly in regards to innovation:

"It's [collaboration] the only way. Collaboration leads to evolution. [...] collaboration leads to invention. That invention leads to competitiveness and competitiveness always leads to safety. It starts with collaboration".

According to participant 10, collaborating with the industry has made their job of regulating the industry much easier as it has improved their understanding of the aerial adventure parks. Participant 10 commented:

"So, I think, it helps with the collaboration in that there's so much more understanding through this relationship and the dialogue and the sharing of information, [...] We're actually here to ensure the public is safe and I think by collaborating with the industry we can do a better job of ensuring the public is safe, than not collaborating with industry [...] I

find it's been easier to get support for changes to our rules, because industry realises it's in their best interests also".

As such, the data seemed to indicate number of benefits of stakeholder collaboration to both public and private stakeholders. Co-learning and co-understanding appeared some of the main benefits, leading to continuous improvement and development of the activity and the industry as a whole. Further, collaboration also appeared to improve the relationships within the industry, which bodes well for further stakeholder collaboration. Indeed, the interview participants spoke of how collaborating with each other not only improved their own operations, but the industry in general. Thus, bearing the data in mind, it would seem that everyone in the industry benefits from collaborating with each other.

5.3.2.1 – Encouraging Exchange Days

Some participants argued for an exchange day of staff and/or managers, particularly among operators, to share knowledge, learn from each other and avoid isolationism through an open-door policy with fellow industry stakeholders. It was noted that some already participate in such practices, though during the interviews there were calls for this to take place industry-wide. Participant 3, for example, commented:

"[...] the biggest problem to me in the industry with risk management [...] is isolationism. And, I think the more that we invite other operators and programmers into our organisation to look at what we're doing and share their thoughts and the more we go out into the market and look at other people's stuff, the better that we are to critically analyse what it is that we're in this for and why we're doing this and what are we doing right and wrong".

Similarly, participant 15 called for exchange days to take place within the industry:

"[...] you and your competitor should have [...] an exchange day, where your guys can go to their course and go through their course and then their guys go to your course, just to see the different ways that you do things. [...] it is something that I encourage".

However, when queried whether this was currently taking place in the industry, the participant replied that "Maybe with 15-20% of the industry" participates in such practices. The reason behind such low numbers was:

“Because, people don’t realise the bigger picture. People don’t realise exchange of ideas and information is a good thing”.

Participant 3 further argued that companies open to such open-door policies were more successful in the industry:

“[...] noticeably what you’ll find is that the companies that are doing the most business in the world are the ones that collaborate the most”.

Further, participant 9 commented that this is a practice they participate in on various levels:

“We’ve done everything from manager swaps [...] I went out to [intentionally left blank] [...] we worked with them to talk about what parts are breaking and why and how we can better maintain them and provide better guest-flow and throughput”.

The data seemed to suggest that arranging exchange days with other industry stakeholders would benefit the individual stakeholder as well as the industry overall as stakeholders are able to learn from each other and thereby improve their own operations. Indeed, the exchange days seemed to improve the individual stakeholder’s understanding of their own business as well as other’s. Once again, it seemed the closed mind-set of the industry was preventing this from happening. Nevertheless, it was argued that those that do participate in such measures were more successful with best practices seemingly improved as a result.

5.3.3 – The requirements for collaboration

During the data gathering it became apparent that trust plays an important role, according to the participants, for collaboration to work. Participant 3, for example, commented on the requirements to collaboration that they have experienced:

“[...] first and foremost trust. [...] the other thing, [...] is having the other person’s best interests in mind. [...] it’s really important to find people that you can collaborate with at different levels too. You don’t just want to find people that are always below you, as far as skill in what they can offer”.

Similarly, participant 9 also spoke of the need for trust, but also pointing out the need to look beyond the industry:

“Both parties have to trust each other. [...] both parties have to have [...] true intent to be willing to share and be open [...] both parties have to have something to give”.

Participant 6 also spoke of the need for trust and, once again, alluded to an existing network, previously described as an “old boys club” by participant 5. When asked about the need for trust, participant 6 commented:

“[...] there’s a pretty strong network of companies or vendors in this industry that I have a high level of trust and because we have the history”.

Participant 20 also spoke of the need for trust and credibility as well as the need for the industry to become more open:

“You have to have knowledge and be able to be credible. Then there’s the level of trust [...]. If they trust you and [...] you truly have their backs, you’re in a partnership [...] everyone’s out there for the public to make sure it’s a safe operation. [...] we’ve got to become a more open industry”.

Respect was another attribute required for collaboration to work, as participant 17 noted:

“Mutual respect [...] honesty and a willingness to learn and make changes, willingness to receive criticism, but then also give honest and productive criticism”.

On the other hand, participant 7 alluded to the need for a certain mind-set from the individual stakeholders:

“People have to be open to it, they have to see the need, they have to understand why it’s important, how it can help them learn and grow, become better [...] that whole process really benefits everybody [...] it helps the industry just become stronger”.

Similarly to participant 7, participant 18 also referred to the need for a certain mind-set and having common goals:

“Everybody having the same common goal [...] having an open-door policy and being honest with each other [...] You have some people out here that have the attitude that, “hey, I know more than you do”. [...] When you have that type attitude, it makes it difficult to exchange information”.

Participant 8 also spoke of having common goals to successfully collaborate, whilst also arguing for more collaboration to take place:

“I think everybody has to agree on the outcome [...] I think they [the requirements] exist. I would say that they’re not as common as they should be”.

Similarly, participant 2 spoke of the requirement of a means for a collaboration to work:

“[...] you need a means. [...] a means to communicate freely. And then, it’s not that complicated”.

On the other hand, participant 19 argued for guaranteed anonymity when sharing sensitive information, such as incident data, with their fellow stakeholders. They argued this was required to enable collaboration as it would help protect company images:

“I think if there is a way to help keep it, somewhat, anonymous more people would be willing to share. [...] it would make people more comfortable”.

Participant 15 also called for anonymity when sharing information on risk management:

“[...] it’s important to share things that I have learned because of other peoples’ incidences, but [...] they should never be able to figure out [...] where that incident occurred at [...] it is very challenging. Especially, in a closed-knit industry like this”.

Interestingly, participant 5 called for some infrastructure to enable collaboration, arguing the need for a risk management committee:

“What a risk management committee would do [...] is collect that data [...] and then put out a report that not only allows people to view a lot of those incidents [...] so that the whole industry can do an after-accident review”.

Evidently, trust was often mentioned during the discussions of the requirement for collaboration and appeared to be the foundation of collaboration. However, the interview participants seemed to agree on a number of requirements, beyond trust, such as common goals, willingness to help and learn, knowledge and experience, anonymity, respect, reciprocity, credibility and an open mind, once again, referring to the need for the industry to open up more. It was widely believed among the participants that these requirements, in turn, led to healthy collaboration, which leads to a stronger and healthier industry. However, it was noted that these requirements did perhaps not exist at a sufficient level.

5.3.4 – Barriers to collaboration

Participants also found various barriers to achieving effective collaboration. Whilst the ACCT conference appeared the main gathering point for many industry stakeholders, away from that it appeared the industry was faced with numerous barriers. Participant 4, for example, found time and infrastructure to be barriers to collaboration:

“For our industry, because it’s expanding so quickly [...] the first problem is just time, right? [...] sort of an infrastructure to be able to share information is another barrier for us, [...] I think the other thing would be controlling the information. [...] trust is one thing, but the next level is like, “are you really right”, right? So, the same thing with the regulators misinformation, misinterpretation”.

Participant 4 further argued:

“That’s [costs of attending conferences] a challenge. [...] I think right now there’s 50 PVMs in ACCT and [...] there’s a lot more people who [...] just choose to be members. If each of those companies sent [...] the majority of their employees, the conference would double in size, and we don’t”.

Participant 9 also argued that the location of the ACCT conference presents a barrier to collaboration as attendance, for smaller organisations, tends to be based on their proximity to the conference:

"I think the downside is for the smaller organisations. [...] they tend to attend based on their geographical location [...] more local and regional collaboration would benefit the smaller organisation".

On the other hand, participant 8 argued that more conferences were not the answer:

"I don't think so. Some of the minds that are not broadened yet are the ones that refuse to go to the conferences to see the bigger picture. [...] Usually, the ones that you argue the most with are the ones that, that aren't involved in the industry".

Similarly to participant 4, participant 5 also found time to be a great barrier to collaboration:

"I think taking the time to compile any of the paperwork [...] smaller-to-medium size businesses, they're already leveraging their time and their allowable business expenses on other more profit-making ventures [...] that's one of the drawbacks for that".

Likewise, participant 10 also spoke of the time constraints many have in the industry and how they try to accommodate such constraints:

"[...] smaller operations, they have finite amount of people and, yeah, their time away from the business is extremely important of value [...] just being mindful [...] like trying to have to have discussions during, like, slow periods".

On the other hand, whilst participant 6 also spoke of time constraints as being a barrier, they seemingly felt that individual attitudes presented the biggest barrier to collaboration:

"Timewise. Yeah, I think that that plays a factor for sure. [...] there's a lot of those smaller operators and they seem to be always demanding, you know, help them being educated [...] and you have to contribute too and if all you do is just sit there and learn from everybody and you're not really contributing [...] there's a portion of them that do that".

Likewise, participant 16 spoke of some of the mind-sets within the industry referring, perhaps, to an unwillingness to learn, which in turn presents a barrier to collaboration:

"[...] if I went to ACCT today and there was a guy or two that were there that were the same size company they were for 20 years and they always wanted to get bigger and they couldn't get bigger it's probably because they couldn't listen and they couldn't learn".

Further, participant 17 spoke of the struggles that smaller operations have in meeting new regulations due to the financial implications of said regulations and therefore making collaboration difficult:

"[...] a lot of the smaller organisations can find themselves in a tough spot as more and more regulations are piled on".

Similarly, participant 20 commented on struggles of the smaller organisations within the industry as well as the stakeholders on the outskirts of the industry. Further, participant 20 also argued that some regulators may be preventing collaboration within the industry:

"[...] you get the small guys that aren't doing it as well as the big guys. [...] They're the ones that are much less likely to, one, participate in this communication, and, two, participate in the industry events because it costs them a lot of money [...] the only way we can share that information and data throughout the industry is by having regulators out there that aren't carrying a stick, but are educating and they do inspections [...] it's not the 95%, it's the 5% on the, on the outskirts that are going to affect the industry in a negative way".

It appeared that the aforementioned trust might also provide a barrier to collaboration if there is a lack thereof. Participant 12, for example, spoke of concerns of losing intellectual property by collaborating with competitors. When asked if sharing information within the industry could improve the industry as a whole, they answered:

"So, the worry about collaborating does prevent true collaborating. [...] so much of our system that we have is actually intellectual property of our corporate founder".

Similarly, participant 9 also spoke of the fear of losing competitive advantage through collaborating, though pointing out that, in regards to risk management, it was a necessity:

"[...] is it really a competitive advantage or is it a safety issue? [...] I'd rather be open and honest and find those problems and address them, than trying to cover them up and hide them and not collaborate with the regulator, because at some point in time it's probably going to come back to [haunt you]".

Likewise, participant 19 argued that some stakeholders were nervous of sharing incident information with each other in fear of increased insurance premiums, damaging reputation and, worst-case-scenario, ruining their companies:

"[...] people are always scared that it could affect insurance premiums. Um, people are scared that it could affect company reputations and therefore wreck companies".

Further, similarly to other participants, participant 19 also pointed out that a lack of infrastructure encouraging collaboration was presenting the industry with a barrier to collaborating on risk management, whilst also commenting that such a task was, somewhat, foreign to the people within the industry:

"[...] as far as sharing information on risk management and stuff like that, yeah, there's definitely some infrastructure missing. [...] it's not in our culture to share that information, it's in our culture to hide that information".

On the other hand, participant 20 argued that the many standard-writing organisations, ACCT, ASTM and PRCA, were presenting barriers to collaboration within the industry:

"[...] so we've got two groups of people, or three groups of people, PRCA is also another group in the States, um, and we're not all on the same page".

Some participants also spoke of isolationism being a barrier to collaboration within the industry, with some stakeholders, apparently, refusing to take an interest in the wider industry. Participant 7, for example, commented:

"[...] it's not going to happen with people in isolation [...] there are lot of operations that, kind of, do operate in isolation and don't really see the need to collaborate. [...] I think it [isolationism] is not good for the industry. It weakens the industry".

Indeed, participant 3 spoke of isolationism as the biggest fear they have in the industry:

“[...] the biggest fear I have is isolationism. [...] we’re going to find that, if we’re unable to, to bring a larger portion of those people into these network, [...] we’re really going to struggle. I think, it’s that isolationism and, I think it’s an arrogance that is really prominent in this industry with operators that aren’t part of the community”.

According to the data, a number of barriers to collaboration clearly exist in the industry. Once again, trust came up, as some feared they might end up hurting their own interests by sharing information on risk management with others. For example, some participants spoke of the fear of loss of competitive advantage through collaborating with others. Further, it also appeared that some stakeholders simply did not have the resources, such as finance and the time, to collaborate and were perhaps too engulfed in their own issues to see the bigger picture of the industry. Indeed, it seemed the smaller organisations within the industry were the ones that struggled with collaboration, despite some participants arguing they perhaps needed it more than the rest. Once again, the issue of having an open mind resurfaced in the discussion, with some stakeholders appearing to disregard collaboration, refusing to listen and learn, thus existing in isolation from the rest. It also seemed that some stakeholders were getting more than they were giving, in regards to collaboration, leading it to become somewhat unequal, thereby potentially presenting a future barrier to further collaboration. Neither did collaboration appear to be part of the industry’s culture. However, interestingly, it seemed that a lack of infrastructure encouraging collaboration existed in the industry, with the annual ACCT conference perhaps providing the only opportunity to engage in such activities. Some participants, for example, called for an anonymous forum to be able to share experiences and learn from each other that way, whilst also commenting on the need for controlling the spread of inaccurate information within the industry. Bearing the aforementioned issues of finance and time in mind, with only one annual opportunity to collaborate it is perhaps not surprising that only a small group of stakeholders actively collaborate.

5.3.5 – Bringing stakeholders in from the cold

Given the apparent small number of stakeholders currently actively engaged in collaborating with each other and the number of barriers present to collaboration within the industry, the interview participants were asked how they envisaged the rest of the industry becoming more collaborative. A number of the interview participants had opinions

on how to motivate their fellow stakeholders to collaborate and become more active in the industry. Participant 19, for example, argued for more electronic tools being made available:

"[...] the best way for everybody to collaborate is to, somehow, do it electronically. [...] we can't all get in the same room and share stories and stuff. [...] so I think we're going to have to do it in some kind of an open-forum [...] or publish incidents and accidents [...] ACCT is exploring regional conferences".

When asked about virtual conferences in the industry, participant 19 commented:

"One of our major goals for the association is to have like a virtual class-room to do webinars, to video-tape some of the presentations at our international association".

Similarly, participant 9 spoke positively of the idea of introducing virtual conferences to improve attendance:

"[...] virtual learning, yeah, is an opportunity and one those associations could look to gain at".

Participant 3 spoke of the changing landscape within the industry as well as improvements developed by the ACCT that would naturally encourage more collaboration:

"[...] looking at creating more regional conferences and, or, get-togethers. [...] introducing a new after-program accreditation, a new e-learning system that would provide resources to our members. [...] ultimately, things that's going to really help people in to be more collaborative that jurisdictions are going to start regulating [...] and it will get to the point where all states are regulating and it will be more and more important for people to collaborate [...] there's already a consolidation going on, [...] single-site operators are going to slowly find that it's harder and harder for them to operate profitably. [...] Um, so, it part will be catalytic to the consolidation".

On the other hand, participant 1 was less enthusiastic on the prospect of motivating stakeholders to collaborate more:

“[...] there’s always going to be people, you know, don’t want to be, you know, friendly or open or sharing of ideas [...] maybe they’ll eventually feel like they’re kind of missing out and wanting to get on-board with that”.

Participant 10 spoke of how their open-door policy encouraged stakeholders to collaborate and share information, be it through meetings or site visits. It seemed that their active approach encouraged stakeholder collaboration:

“[...] building, you know, the recognition that, yeah [...] we’re actually going to listen and engage and consider their feedback and thoughts and what not and I think it’s that reputation the agency builds, you know, a trusting relationship over time that helps people come to it”.

However, participant 6 proposed that an organisation, like the ACCT, ought to mandate its members to be actively involved. When asked how stakeholders could be motivated to collaborate, they replied:

“Well, that has to be facilitated. You have to reach out, you have to do surveys, you have to ask for it and, you know, in some respects, you have to demand it”.

These thoughts were echoed by participant 19:

“[...] some states require it, that you report an incident or an accident within 24 hours of it happening. [...] there’s a chance that, like ACCT could require all of their PVMs and, or, accredited programs to do that, but as an association we could [...] lose members, [...] we just have to be OK with that if that’s the way we decide to go”.

Given that the data suggested many barriers preventing collaboration within the industry, the issue of motivating stakeholders to join the conversation was important. It was argued that conferences should be more accessible, either through the creation of regional conferences and, or, the creation of virtual conferences, once again referring to the improvement in infrastructure required. Therefore, the data seemed to suggest that responsibility resided, to a certain extent, with an organisation like the ACCT in ensuring

said infrastructure is available, but, potentially, also requiring its members to actively participate.

5.3.6 – Public stakeholders’ industry experience

The concern over the lack experience, specific to the aerial adventure industry, among the public stakeholders was a recurring theme during the interviews. It seemed to indicate a compelling need for collaboration between public and private stakeholders. Participant 3, for example, bemoaned the “rubber stamp” process that many states utilise when it comes to regulation. Similarly, participant 15 argued that many states simply have a “paper regulation”:

“I don’t think the public agencies have enough knowledge about this industry to know what to do with it. [...] they’re easy to work with, but I think, you know, from what we’ve seen, it’s just a check-list. [...] they don’t have the knowledge to actually look at that inspection report and know whether the course is doing a good job or not”.

Likewise, participant 19 spoke of the challenges and uncertainty they have faced when dealing with the public stakeholder:

“I think it’s a big deal [lack of industry experience among public stakeholders]. I mean, we just did a zip line in Iowa this year and the state called and said, “we’re going to inspect your zip line, um, and regulate those zip lines” and I said, “well, that’s wonderful, um, but you can’t, you know, because it’s not in your state laws that, that you can inspect and regulate zip lines”. I said, “So, I’ll be happy to talk you through anything, provide anything, but as far as regulation goes, there’s nothing to regulate it to”. Um, so there’s a lot of, and that’s happening”.

When asked how many states currently regulate the industry, participant 19 further commented:

“I bet we’re up to about 20. I don’t know for sure, but, they range from, like California has to have their state inspector inspect every course, to states that don’t care, you know, or states that just tell you to turn in an inspection report from a qualified person. [...] There were two offices in Michigan that [...] both came out with zip line regulations, but they were different from each other. [...] So, it’s kind of all over the place”.

Participant 1 also seemed to allude to similar issues of 'rubber stamping' when commenting on their experience in dealing with the public stakeholder:

"[...] you know one state is [...] doing an inspection of our courses, but it's not a real inspection, you know. [...] they just don't have the qualifications to deal with an inspection".

Likewise, participant 11 also spoke of the seemingly confused state of some public stakeholders on how to manage the industry. The participant also spoke of the challenges the public stakeholders face in categorising the industry correctly and the importance of the public and private sector collaborating:

"Yeah. I mean, that's the case in the, in the county that I'm in is that the building department said, 'we don't know how to inspect this'. [...] I think the more the public bodies can rely on the existing industry bodies for certification, that's going to be better, but I think, overtime, it's going to morph into government oversight".

Further, participant 8 pointed out that many jurisdictions are learning on the job and whilst some are keen to collaborate with the industry in an attempt to understand what they are trying to regulate, others are less interested. Nevertheless, it appeared that as they have entered the industry, public stakeholders have, naturally, undergone a learning curve, and still do. Participant 8 commented:

"[...] everybody is kind of learning how to regulate these things and it's still more often than not regulated, but the ones that are trying to regulate it don't get it right the first time. So, they're having to struggle through kind of what doesn't work together whenever an accident happens. [...] the answer to that [do states collaborate with the industry] is: sometimes. [...] and that would be where they would go to ACCT and ACCT have some draft legislation [...] other states, though, don't want anything to do with other peoples' opinions [...] and they immediately clump you under amusement device, [...] but when they do they hold you to all the rules of a rollercoaster, which aren't always as easily interpreted from across structures, so... and legislation's slow, right? [...] It means that everything we design, we design as best we can to meet ASTM and ACCT and, you know, the states. We put in a lot of preparation for something coming down the line, one day in the future and we want

our client to be, you know, as prepared as possible for knee-jerk regulation whenever it comes about”.

Indeed, according to participant 7, whilst they consider it a positive, the entrance of the public stakeholder also presents the industry with great challenges and therefore argued that the industry will have to collaborate and, to a certain extent, educate the public stakeholder:

“Where it really comes to be very important is over any regulation or interaction with government officials or agencies that are involved with permitting or regulating the industry, because when they’re unfamiliar they don’t, typically, know what is being done to mitigate the risk, to reduce the possibility of accidents and injuries. [...] I’m seeing a need for better education, especially on the commercial side, over interpreting and using standards, because I think that can be confusing [...] for a lot of people”.

“[...] after an accident, that’s typically when we try to offer support, resources, education, understanding to any regulators, because they often inquire about [...] I think we’re going to see more regulation in the future, especially as the industry grows and becomes more noticed. And regulation is not a bad thing. I mean, ultimately it’s designed to protect the consumer and the public and we just want to make sure [...] stakeholders are involved [...] so, it’s really help the regulator understand”.

On the other hand, participant 9 seemed more sympathetic toward the public stakeholder, commenting on the struggles they have in understanding the industry and thereby classifying it correctly. However, they too found they, to a certain extent, had to educate the public stakeholder:

“I think they have a hard time deciding what we are [...] on one side there’s a group that wants us to be seen as a rock climbing guides and river rafting [...] then there’s the other side that wants to see us as more in line with the amusement parks and so, that causes conflict and that causes the debate that usually struggles”.

Indeed, participant 9 argued that the involvement of the public stakeholder was positive for the industry and provided another layer of risk management:

"[...] just one more layer in that risk management plan. [...] regardless of their attitude, all of them have the best intent at heart, which is [...] provide safety to the general public. If you can keep that in your mind-set it makes it a lot easier to work together".

Like participant 9, participant 17 also spoke of successfully working with public stakeholders, making the process of regulating the industry in those particular states more of a joint effort. When asked if the states they had built in looked toward the industry for guidance, participant 17 commented:

"They do look to the industry [...] they look to ACCT and then they also ask, you know, industry professionals on an individual level in consultation. I think certain states have had the experience of just going for it on their own and they've come out with these standards and then they've received a lot of opposition because people have said "that's impossible. You have no idea what you're talking about" and then they say, "OK, well, let's talk about it" and then it becomes more of a joint effort".

Further, when asked if they had to educate some public stakeholders, participant 17 commented:

"Definitely. And, it's been a great conversation, whenever it has happened. I very much like to be a part of that process, because [...] I think there's a way to mitigate risk, make things work, set industry standards that are attainable and desirable, you know, for all parties involved".

Participant 5, however, argued that in their case they had been able to educate the public stakeholder. When asked whether they considered it an issue that many public stakeholders have no industry experience, participant 5 commented:

"Very much so. And it's getting better in some areas [...] it took a lot of education [...] so, now they're relatively well educated. [...] there's one or two states that are less open minded and actually seem like they are forwardly attacking the stakeholders in the region".

The data seemed to suggest that the level of industry experience among public stakeholders trying to regulate the industry had, on occasion, been rather problematic. It seemed that some states were simply waiting for a serious accident to occur before opting

to regulate the industry. Indeed, according to the data, some public stakeholders did not seem to have the knowledge to regulate the industry, a clear cause for concern among the private stakeholders. On the other hand, it seemed many states had opened up to the industry in an attempt to understand it, through stakeholder meetings for example, seemingly with the intent to regulate the industry with the industry.

5.3.7 – Stakeholder collaboration and leadership

With a seemingly lack on infrastructure to facilitate stakeholder collaboration and only a small fraction of the industry apparently engaged in collaboration, the importance of leadership was, once again, discussed during the interviews. Participant 4 spoke of the importance of leadership in gathering and listening to its constituents to ensure stakeholder buy-in:

“I did have colleagues [...] saying that they didn’t feel like their voice was heard always in the past, and now they feel like Shawn is doing a better job of listening and I think that that is huge for buy-in, so that people are invested and want to support the organisation [...] when you’re working in leadership across an industry, you, the top tier person, actually has to be a voice, or a representative of the base-level, of these vendors, so, like, I would want someone that would represent my interests”.

Likewise, participant 20 spoke of the need for leadership to bring the industry together:

“The leadership has got to be educated on the challenges the industry is facing. [...] they just need to be aware of it, so that, one, they send their people to these collaborative events. [...] We need to get more people from some of these other venues, from around the country to start either buying in to ASTM or ACCT changing their ways. We need to all come together and create one standard at some point and be using one standard that works for all of us”.

Participant 19 also spoke of the importance of leadership in ensuring buy-in among stakeholders:

“I think it’s [leadership] huge. I think there, you know, could be a committee from ACCT that helps drive this and it’s going to take the right people to get everybody to buy into it. You know, it’s going to take the big leaders in the industry to buy in so everybody else buys in”.

In a similar vein, participant 10 spoke of the need for effective leadership to enable industry-wide collaboration:

“Oh, I think that it has to start at the top. It has to be, at least, that it’s of value right at the top, that’s the philosophy, or the mind-set, on, you know, “we’ll be better and have better rules if we have better information through collaboration”.

Likewise, participant 15 also spoke of the need for a top-down approach to encourage collaboration:

“I think, within the industry, it probably comes from the ACCT and has to be pushed from the ACCT downwards. Just the whole message of collaboration of, ‘we’re in this together as an industry’”.

Once again, the data seemed to indicate a requirement for strong leadership in facilitating stakeholder collaboration at an industry-wide level. If the industry lacks infrastructure, it appeared someone has to create said infrastructure and someone or something has to provide the means to facilitate such collaboration, be it electronically or physically, to encourage and motivate the industry stakeholders to participate.

5.3.8 – Collaborative risk management

During the interviews it seemed that some form of infrastructure to encourage stakeholder collaboration within the industry was missing. Many participants spoke of the need for more incident data and for infrastructure to share incident data with each other, but also commented that confidentiality was paramount. As a result, during the interviews, the participants were asked if the creation of an industry-body, with the sole focus of improving risk management procedures, would be beneficial. Further on in the data gathering process, participants were also asked if an equivalent of SaferParks, as recommended by participant 13, would be beneficial in the aerial adventure industry.

Participant 19 argued for the need for such a group arguing that it would assist in the betterment of the industry standards and provide more data to everyone and thereby help prevent incidents from occurring:

“Yeah, I think that would help a lot. [...] I think it would help look at our standards, see if our standards are deficient in any way. [...] I think there, you know, could be a committee from ACCT that helps drive this and it’s going to take the right people to get everybody to buy into it. [...] it’s going to take the big leaders in the industry to buy in so everybody else buys in”

Similarly, participant 5 believed this was a necessity in the industry. When asked the question, participant 5 replied:

“Completely. [...] that is actually, probably the number one for me, what the industry should be, all of the industry groups should be doing right now. [...] having a committee of some sort, branching across the entire industry, that would review and compile any communication there and act as the central communication hub to not only invite people to join in the communication, but also disseminate that communication out. [...] having leadership from the different organisations, major organisations, buying in and also championing it and really moving people forward on it”.

Participant 17 also spoke of the need for such an industry-body, commenting:

“That’s [industry-body] amazing. [...] I think that OSHA has something like, some, kind of, unwritten rule, that if someone gets hurt, then you’ve done something wrong [...] I think that that’s true and the more knowledge that we have of what people are encountering the better job we can do as an industry to mitigate that and manage it”.

Likewise, participant 13 also spoke of the need for such an industry-body, pointing out that it would enable the industry to gather and understand incident data:

“Yeah, I think it would be great, because I think one of the things that happened with the SaferParks data is that it really showed that we’re not doing a good enough job with children. [...] a high percent of the injuries were with small children. [...] Yeah”.

Participant 4 also spoke of the need for something like SaferParks for the industry:

"[...] for skydiving it's been this way for so long, but there's a magazine, there's a couple of magazines that publish incidences confidentially, they just sort of give the learning opportunity from it".

Participant 7 also spoke of the need for this commenting:

"Yeah, I think there is a need again, through our standard development committee, that's, kind of, our main channel right now. But, what I'm seeing with the standards, a need for education and training around that, not just, sort of, publishing standards and putting it out there, but really helping people figuring out how to comply with the standard. [...] I think that [a safety committee] is something that is in our mind. [...] I think there's a huge need for that".

Participant 18 also saw the benefit of such an industry-body:

"Oh, I think it would, sure. Anything like that would be good for any industry like that. [...] it's all about exchanging ideas, giving information, exchanging ideas and information, any trends. All of that is very important".

Similarly, participant 4 was very keen on such a group to provide some oversight and direction. However, the participant was not sure how to do it, nor what it would entail:

"Yeah. Absolutely. I think that would be a huge benefit. [...] I mean, we have ASTM [...] we have paid people that run the organisation, but they're not running our industry. [...] and it's the same thing for ACCT, they're not necessarily monitoring the industry. [...] I think that our industry absolutely could use some sort of organisation. How that would work [...] Um, I think that it is absolutely a huge need and not having it has led to people, other people controlling the direction of our industry, like regulators, that don't necessarily have the insight".

However, participant 15 was slightly apprehensive of the idea, due to the sharing of data. When asked about the industry-body, participant 15 commented:

I think it could be beneficial, yeah. [...] the hold-back there would be data. [...] we all have data for each agency, or each company, but [...] we're pretty proprietary of our data [...] but

that's definitely interesting, you know, on whether we would be willing to turn over data to the ACCT".

Nevertheless, not all participants were for the creation of an industry-body. Participant 8, for example, commented:

"I don't know. All these different bodies that exist can actually conflict with bringing the industry together in general. So, you know, there are more bodies than we know what to do with right now and it's a little bit, you know, we can create all sorts of new stuff, but it doesn't help to create place if you don't have the collaborative need identified. [...] Yeah, I think places already exist and I think if, if you want, if a new place is needed it will organically be created [...] Nobody has extra time to devote to collaboration, you know, because they're actually running very successful businesses".

The issue of trust came up, once again, with participant 11 arguing against the formation of such a group due to concerns over giving away proprietary information and potentially being ridiculed by others within the industry. Once again, the issue of anonymity was brought up. Participant 11 argued:

"I think the danger that I would see, from commercial people like myself, that if I post on there or I give them information, like, "hey does anybody have a longer lasting delay device other than an ID?", it may give people some type of information I don't want really want to put out in the public domain. [...] and then people might ask stupid questions, you know, and then they'll be ridiculed in the industry or something like that. So, I think it's a fine line of how, of how that would happen".

With a lack of infrastructure currently providing a barrier to collaboration within the industry, the data seemed to suggest that the interview participants, perhaps somewhat apprehensively, felt the creation of an industry-body with the sole-focus of improving risk management would be beneficial. However, it is worth pointing out that some scepticism did exist, as some argued against the creation of the safety committee, bearing in mind the amount of organisations already existing within the industry. This is quite understandable, yet the existing organisations, such as the ACCT or ASTM, could arguably provide the infrastructure for the safety committee, which would eliminate this concern as a result. Nevertheless, it appeared that such a body, in combination with something similar to SaferParks, would provide the industry with means to collaborate on such a sensitive

matter, whilst still maintaining their individual anonymity, with the issue of the latter appearing to present a major concern among the stakeholders. Nevertheless, the what, how and who of such a group remain unanswered.

Chapter 6

6.0 – Discussion

Chapter 5 explored the 20 interviews completed as part of the data gathering process of the study. Two codes, risk management and stakeholder collaboration, as well as twenty-three themes were discovered, which will be critically discussed in their wider context of the literature in this chapter.

6.1 - Risk management

6.2 – Perceived risk

Whilst perceived risk was discussed extensively in chapter five it was also an issue brought up in chapter two, the literature review, in a similar connotation: the illusion of risk. Indeed, the data further seemed to justify the author's decision to class aerial adventures as an adventure tourism visitor attraction. The interview participants spoke of a need to provide a thrilling experience, enabling participants to experience a sense of risk-taking, though without experiencing actual danger. Indeed, it was argued that without the perceived risk, there was no adventure. The sense of adventure appears essential to this activity, it is in the name: aerial *adventure* park. As such, a paradoxical relationship with risk seemed to exist within the aerial adventure industry, similarly to adventure tourism (Buckley, 2012). Indeed, this illusion of risk is crucial to the activity, as evidenced in the findings chapter of this study, with perceived risk, to a certain extent, also providing the actual risk. This was further supported by the literature within the discussion on adventure tourism, with many adventure tourism academics arguing perceived risk is fundamental to such attractions (Cater, 2006; Bentley et al., 2010; Buckley, 2012; Page et al., 2006; Miles and Priest, 1999; Holyfield and Fine, 1997).

Millington et al. (2001: 67) outlined the motivations for undertaking adventure activities claiming that 'adventure travellers expect to experience various levels of risk, excitement and tranquillity and be personally tested'. People are attracted to such activities as aerial adventure parks to escape their risk-averse, mundane everyday lives and replace them,

albeit briefly, with thrills, excitement, a sense of danger and to challenge themselves. As such, this justified the decision to align the aerial adventure industry with adventure tourism due to the similar characteristics. Other similarities between adventure tourism visitor attractions and aerial adventures activities include uncertain outcomes, challenge, insight, excitement, responsibility, commitment, anticipated rewards and play (Pomfret, 2016), elements highlighted within the data as well. Kerr and Mackenzie (2012) also argued that adventure tourism is comprised of two components of adventure: physical risk (physical), social (humiliation) and emotional risks. The data seemingly suggested that aerial adventure parks contained these components, once again linking adventure tourism and aerial adventure parks. Yet, in light of serious accidents occurring within the aerial adventure industry, certain inherent risks clearly exists whenever untrained people venture 20-60 feet up in the air. This would further seem to contradict previous research by Cater (2006) and Buckley (2012) who argued that the risk was a mere illusion. Responsibility therefore lies with the industry to ensure that, where possible, the inherent risks are managed to such an extent that the participant is faced with an illusion of risk, rather than actual risk. Nevertheless, due to its mass appeal and low levels of actual risk, aerial adventure parks should therefore also be classed as 'soft' adventure, as according to Swarbrooke et al. (2003).



Figure 4 Actual Risk vs. Perceived Risk (Author, 2017)

However, in order to explore the industry's relationship with risk and to understand risk management procedures it was important to understand the perceived meaning of risk within the industry. Yet, this proved a stumbling block during many interviews, with some participants seemingly unsure of how to describe risk, which, perhaps, signified the somewhat odd relationship with risk in the industry. Within the adventure tourism literature, risk has been described in positive terms (Ryan, 2003), though traditionally, risk has been described in terms of negative outcomes (Mitchell, 1999). On the negative side,

Chapman and Cooper (1983) for example, described risk as the possibility of incurring economic and financial losses or physical-material harm, due to an inherent uncertainty resulting from an action taken, a description that perhaps holds true within the aerial adventure industry, given most incidents appear to stem from human-error. However, the Institute of Risk Management (2002) alluded to a hybrid definition of risk, defining it as a combination of the probability of an event and its consequence, whether that was positive or negative. Similarly, the interviews indicated a hybrid version of negative and positive connotations of risk, with one needing the other to provide the adventure experience. Once again, the paradoxical relationship with risk becomes apparent with actual risk clearly representing something negative, but the perceived risk enabling participants to experience positive emotions. As such, with perceived risk being essential to the activity, one could argue that the relationship is somewhat reminiscent of the yin-yang symbol, depicted in figure 4, with both negative and positive connotations of risk required to exist together to create an adventurous experience, in turn creating a never-ending struggle between the two types of risk in the same way that yin-yang represent the continuous balancing-act between good and evil to create something complementary. This point further leads back to the aforementioned idea of risk management being a never-ending process within the aerial adventure industry, as put forth in section 5.2.2.8. Yet, to maintain this equilibrium, and thereby ensure the long-term sustainability of the industry, effective risk management evidently becomes critical. However, this is clearly a challenging task.

6.3 – The challenges of effective risk management

From the data it seemed to indicate an industry struggling, to a certain extent, with its own success and the challenges this has brought to risk management. Due to the industry's incredible growth in a short space of time, it seems that pressure is on certain stakeholders to provide ever-changing and improving experiences, to go further by providing more thrills, faster zip lines and bigger parks. With competition being fierce, the demand is to continuously advance and provide an improved experience. This, in turn, creates more inherent risk, meaning new challenges to risk management are constantly arising and thereby making risk management an increasingly challenging task. This argument is supported by the literature where Slack et al. (2010) and Andersen (2010) argued that changes in demand and to operations present increasing challenges to risk management.

However, it is worth pointing out that the literature does recognise risk management as a dynamic process demanding constant improvements (Di Serio et al., 2011). Further, once again, the data indicated challenges to risk management arise in an attempt to turn actual risk into perceived risk, a task that involves many layers of risk management, such as staff and participant training, communication, proper use of equipment, design and following standards. Such a description of the complex make up of risk management is somewhat similar to Hopkin's definition (2014: 38) who defined risk management as 'a set of activities within an organisation undertaken to deliver the most favourable outcome and reduce the volatility or variability of that outcome'.

However, the data would also seem to suggest the industry suffers from perception issues, with participants and public agencies appearing unclear of how to classify the aerial adventure industry, which in turn has led to a misunderstanding of the activity in some cases. As is the case with many other adventure tourism visitor attractions in general, aerial adventure parks have gone from being small and specialised activities to catering to the masses (Giddy and Webb, 2016; Taylor et al., 2013; Cloke and Perkins, 2002). This may have contributed to the misconception issues as public stakeholders simply do not know what this new type of visitor attraction is. The data, for example, pointed to a misconception among participants and public agencies who tend to classify the activity as an amusement ride. Indeed, even the adventure tourism literature argued that responsibility does in fact lie with the operators to ensure their participants are safe (Cater, 2006), thus contributing to this misconception. Evidently, according to the data, some responsibility still resides with the participants in the aerial adventure industry. Such misconceptions brings challenges to risk management due to the levels of participation of both staff and participants being vastly different at aerial adventure parks as compared to amusement rides, which in turn results in inaccurate expectations of participants and public agencies.

The human factor would appear to play a much greater role in risk management than compared to amusement rides. Interview participants, for example, spoke of amusement ride attendants simply having to push buttons to start and stop rides with participants having little to no involvement in the process of the ride itself. However, on aerial adventure parks much of the risk derives from the level of participation of staff and participants as a result of certain levels of independent play and exploration existing and

whilst these levels are decreasing due to innovation, they still present the industry with challenges. Therefore, Slack et al.'s (2010) notion that human error presents the root cause of most failures would seem to apply in this case. Further, by expecting an amusement-type ride, participants may, for example, not consider the inherent risks existing as well. For example, one interview participant argued that the average participant struggles to appreciate that it is their actions that impact their safety, while another commented that the biggest risk is participants breaking the rules. Further, unlike in the role of amusement ride attendants, the data seems to suggest that aerial adventure park staff have greater responsibilities, including performing rescues of participants.

As such, aerial adventure parks seem to share more characteristics with adventure tourism than amusement rides, as argued in the literature review chapters of this study. Bearing this in mind, it would be advisable to consider these similarities when dealing with the activity to avoid the misconceptions. These parks are undoubtedly visitor attractions (Leask, 2010), but are seemingly not amusement rides in their current state. By participants and public agencies having misconceptions of the activity, their mind-set in turn is inappropriate and creates further challenges to the industry. As such, it would appear that, once again, effective communication becomes critical to ensure that the expectations of the participants and public agencies align with what the activity actually offers through education.

6.3.1 – Knowledge transfers and risk management

Knowledge, communication, training and the education of stakeholders, with a particular focus on staff and participants, was a recurring theme during the interviews, providing tools to effectively combat the challenges to risk management. As such, the importance of knowledge transfers was evident as the various interview participants spoke of how they communicate internally and thereby learn from each other and improve their operations. Seemingly, knowledge transfers were one of the pillars of IERM. Some participants spoke of the importance of regular meetings, for example, and encouraged open-door policies to ensure that risks were effectively managed. This is supported in the literature with Turner and Toft (2006) arguing that lessons learned need to be passed on and Cooper (2006) who explained that in order for knowledge to be transferred effectively, an open decentralised

environment must exist. Further, academics have argued that by empowering employees, risks are more likely to be identified and dealt with in a quicker manner (Sarpong and Maclean, 2014; Sax and Torp, 2015). Indeed, the literature has argued for a culture where employees are empowered and encouraged to identify, address and notifying management of possible risks (Sax and Torp, 2015). The data seemed to indicate that, within the individual organisation, front-line staff, for example, possess a great deal of knowledge and many interview participants argued that getting a hold of this knowledge was essential to risk management, hence the importance of such policies. However, in the data, emphasis was also put on the knowledge transfers taking place between the operators and the participants.

The data indicated many participants are uneducated in regards to the activity upon arrival, an issue also recognised in the literature (Page et al., 2006), meaning operators only have limited time to communicate, train and educate the participants prior to admitting them on the courses. For this reason, several interview participants argued that communication was the cornerstone of their risk management strategy, an argument supported by the literature (Mikes, 2011; Drew and Kendrick, 2006; Christiansen and Thrane, 2014). Indeed, one participant spoke of an internal safety committee at their organisation, which essentially streamlined the transfer of knowledge between various departments, something also recommended in the literature (Annas, 2016). However, throughout the interviews, it appeared that the industry, as a whole, was missing similar infrastructure encouraging such knowledge transfers between stakeholders.

As such, it would appear effective communication is reliant on the right organisational culture as well, an argument also put forth by Christiansen and Thrane (2014). Many interview participants, for example, described how risk management had embedded itself in their cultures and become the basis of everything, starting from the bottom and going all the way to the top of the organisation. Indeed, a participant described every role in the organisation as a “risk manager”, whilst others spoke of slogans, such as “doing right”. The interview participants seemed to have the belief that such a culture was imperative for their long-term sustainability and success, making it another pillar of IERM. The literature supports such notion of the creation of a risk management culture, arguing it is essential for effective risk management (Mikes, 2009; 2011; Green and Jennings-Mares, 2008).

Similarly, Harner (2010) argued that risk management must be included in an organisation's infrastructure and be a part of the organisation's operating activities to be most effective.

6.3.2 – Innovation: A blessing *and* a curse?

Chapter five of this study illustrated a particularly fast growing and dynamic industry constantly looking towards innovative products and approaches to improve the activity by making it safer and more exciting undoubtedly to improve long-term sustainability. The participants spoke of the development of equipment having tied harnesses out of webbing in the past, to now having developed equipment such as the Smart Belay ensuring participants are never unhooked from the belay cable whilst on the course. Staff no longer have to watch participants "transfer" individual carabiners at a time and can instead focus on other safety matters. Some insurance providers also offered discounts to those who invest in smart belays. Further, the data seemed to indicate that the aforementioned appetite for more thrills, faster zip lines and bigger parks has led to a continuous cycle of innovation within the industry, with one participant describing how they are under pressure to develop dozens of elements each year to keep prospective and current clients interested. The literature supports these notions arguing that demand and competition often encourages innovation in new industries (Klepper and Malerba, 2010; Roper and Tapinos, 2016). Further, Freel (2000) argued that innovation is essential for competitiveness as well as to satisfy demand of an ever—changing consumer. Indeed, experts argue that by embracing innovation small organisations increase their likelihood of survival (Cefis and Marsili, 2006; Ruhanen and Cooper, 2004). However, such innovations also come at a financial cost, meaning some have yet to invest in them.

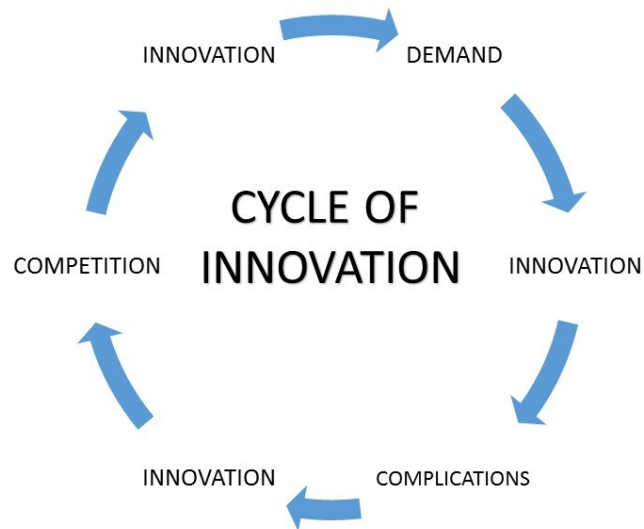


Figure 5 Cycle of Innovation (Author, 2017)

Whilst innovation has brought solutions to certain challenges within the industry, it has also created new challenges as stakeholders attempt to fit them into their operations. Innovation brings change and with change comes the unforeseen, the bane of risk management, potentially exposing the organisation to additional risks (Hahn and Kuhn, 2012; Madrid-Guijarro et al., 2009). The constant demand for bigger, faster and longer is at times pushing some stakeholders to use products in a way they were never intended to. Further, according to the data, accidents have happened due to innovation, though the issues caused by innovation appear to have been solved through further innovation. Nevertheless, the data seemed to indicate significant changes to operations and therefore resulting in a few bottle-necks, such as new innovative equipment being introduced, yet operating poorer than the equipment it was meant to replace. One participant, for example, argued that someone will always find a way around new technology or said technology will create new challenges. As such, innovation within the industry appears to resemble a never-ending learning curve with constant improvement required, as depicted in figure 4. One could argue that, to a certain extent, the industry is a victim of its own success. Yet, the data appeared to depict innovation with an overall positive impact, depicting an industry undergoing constant change as it seeks to continuously improve, which in turn will enhance its long-term sustainability. Indeed, the arguments put forth by the interview participants posit the relationship between risk management and innovation

in a vastly different light to Borgelt and Falk (2007), for example, who argued that emphasis on risk management will stifle innovation. In the case of the aerial adventure industry, risk management appears to have put innovation into the fast-lane. As such, the mind-set that innovation cannot take place without taking risks (Wince-Smith, 2005) seems applicable within the aerial adventure industry with stakeholders, particularly builders and operators, introducing new equipment or using existing equipment in new ways in an attempt to provide safer and better operations. As such, one could argue innovation provides another pillar of IERM.

6.3.3 – Leadership and its impact on risk management

Leadership and its impact on risk management was an area only marginally explored within the literature review chapter on risk management, chapter two, of this study, with more focus being placed on leadership and collaboration. However, it was a point continuously brought up during the interviews with the data seemingly suggesting that without effective leadership effective risk management is not attainable, making it one of the pillars of IERM. Bearing this discovery in mind and to reflect this, new literature was introduced in this section. The data described leadership as the foundation of effective risk management, setting the tone, leading by example, selling a vision and creating the aforementioned all-important culture. Indeed, all the challenges to effective risk management discussed so far in this chapter appear to lead back to leadership. If the transfer of knowledge represents one of the key layers to risk management, the facilitation of the transfer of knowledge is derived from leadership (Nguyen and Mohamed, 2011; Crawford et al., 2003; Politis, 2002). Further, academics argue that leadership is essential in ensuring risk management procedures are implemented effectively (Harner, 2010; DeLoach and Thompson, 2014).

6.3.4 – Unstructured structures: an oxymoron

The multitude of standards presents the aerial adventure industry with a number of challenges to risk management, according to the data. Whilst the various standards provide the industry with a form of structure the data depicted an unstructured industry as a number of stakeholders are following different standards, therefore presenting an oxymoron. The data seemed to suggest the different standards encouraged individualism, rather than collectivism in regards to risk management, therefore seemingly splitting the industry into groups. Further, many of the interview participants argued that the number of

standards also presented a challenge to risk management due to the number of different understandings present and some standards contradicting each other, or simply being difficult to understand as a result. In other words, the standards were written to improve risk management procedures within the industry, but given the multitude of standards, have also contributed to a number of challenges with some states only accepting one type of standard for example. A similar argument was put forth by Billock et al (2015), pointing out that the standards should be combined to improve risk management procedures within the industry. According to the data, with many stakeholders being small-to-medium enterprises, the complex nature of some standards also presents the industry with extensive challenges. As a result, the data indicated a need for the combination of standards to provide better structure to the industry. The literature supports this argument, with a need for structure and organisation recognised requirements of effective risk management (Lundqvist, 2015; Sax and Torp, 2015; Harner, 2010). Indeed, Sax and Torp (2015) and Harner (2010) both argued that individual organisations, as well as the industry on a whole, require structure as well as monitoring and reporting systems to both holistically and strategically identify, gauge and focus on risks.

6.3.5 – A holistic approach to risk management

The data indicated a need for an all-encompassing, holistic approach to achieve effective risk management. Given the nature of the aerial adventure industry it seemed that for it to be effective, risk management had to consume the organisation, as such providing the foundation of everything else within the organisation. Bearing this in mind, the complex task of achieving effective risk management was, for example, described as a layered process, a system protecting the policies and procedures of the organisation. The literature supports such a consolidating approach to risk management, considering all risks collectively and thereby allowing the organisation to make calculated operational and strategic risk management decisions (Gatzert and Martin, 2015; Bromiley et al., 2015; Choi et al., 2015; Brustbauer, 2014; Nocco and Stulz, 2006; Stroh, 2005; Hopkin, 2014; Lundqvist, 2015; Gordon et al., 2009). Such an approach to risk management would seem ideal for the aerial adventure industry given the level of innovation taking place and the ensuing changes occurring on a regular basis. This is further linked to the benefit of industry-wide stakeholder collaboration, given the holistic view provided by collaboration (Graci, 2013). However, the data also seemed to indicate a need for the individual organisation to open

up to others within the industry, encouraging third-party inspections, thus, once again, highlighting the need for knowledge transfers between the various stakeholders within the industry.

6.3.6 – An accident and its wider impact

It appeared that the argument for more inclusivity between the various stakeholders found support in discussion on the wider impact of incidents and accidents within the industry. The data seemed to suggest that an incident or an accident at one park would, undoubtedly impact the rest of the industry negatively in various ways, but particularly financially. Lawsuits are likely to materialize after the fact and the industry is currently experiencing increasing insurance costs due to incidents occurring, for example. The data also appeared to suggest that given the infancy of the activity in the US, as well as the public's lack of education in relation to the activity, incidents and accidents also lead to perception issues, with consumers likely to avoid aerial adventure parks as a result. A knock-on effect of incidents and accidents also seemed to lead to the emerging involvement of public stakeholders, with the data arguing that some states do not want to take part until a serious accident occurs. However, some interview participants argued that once states do take part, in the aftermath of an incident or accident, it is likely to be on the false premise, with decisions likely based on emotions rather than what is feasible. The notion of incidents and accidents having a wider negative impact is supported in the literature by Callander and Page (2003). Indeed, it would seem that it is not only the individual organisation's reputation on the line in the aftermath of an incident or an accident, but the industry's as a whole. Reputational damage is, arguably, more damaging than physical damage. E. Neville Isdell, the CEO of Coca-Cola (Atkins et al., 2005: 8) explained the difference between the two:

“If I lost all my factories and trucks but kept the name Coca-Cola, I could rebuild my business. If I lost my name, the business would collapse”.

Bearing that in mind, it would seem beneficial for the individual stakeholders to adopt a collective approach to risk management rather than an individualistic approach as incidents and accidents are likely to have a negative impact on everyone within the industry.

6.4 – Industry-wide Enterprise Risk Management

To summarise, the data and the literature gathered for this study acknowledged the need for openness within the aerial adventure industry in regards to risk management, arguing for a collective approach instead of an individual approach. The industry faces great challenges to risk management with risk-levels to a certain extent walking hand-in-hand with the activity as various stakeholders' desire faster, longer, bigger attractions, yet do not wish to face actual danger. As such, effective risk management becomes a requisite. However, the industry faces great challenges to achieve effective risk management, with perception issues existing, for example. In turn, the industry is attempting to find the answers to its risk management challenges through innovation, whilst also continuing to satisfy demand. However, the innovation is subsequently leading to further issues and thereby creating a never-ending circle in the pursuit of perfection. With an all-encompassing holistic approach to risk management, effective leadership as well as appropriate infrastructure encouraging knowledge transfers seemingly required within the aerial adventure industry, the industry-wide implementation of enterprise risk management (IERM) is the ideal solution to the risk management challenges faced by the industry, as argued in chapter two of this study. Interestingly, many interview participants were already somewhat engaged in a similar approach, albeit internally, with one participant apparently recognising the importance of effective communication having established an internal safety committee. The challenges faced by the aerial adventure industry, as a whole, are addressed by IERM, be it through the establishment of a safety committee encouraging knowledge transfers between the stakeholders, innovation, the establishment of an appropriate culture and the appointment of a Chief Risk Officer (CRO) to provide leadership and thereby offering an organised industry-wide approach to an industry-wide problem, as depicted in figure 5, below. As such, leadership, culture, knowledge transfers, innovation and infrastructure provide the pillars of IERM, as discussed in sections 6.3.1; 6.3.2 6.3.3, required for the system to be successful. IERM provides the holistic, all-inclusive approach to risk management seemingly desired by the industry and encourages stakeholder collaboration through the safety committee. As such, the focus becomes on the collective rather than the individual, knowing that incidents and accidents at one park will have a wider negative impact on the rest of the industry. Finally, IERM also provides the adventure tourism literature with a risk management framework, a recognised need (Cheng, 2017).

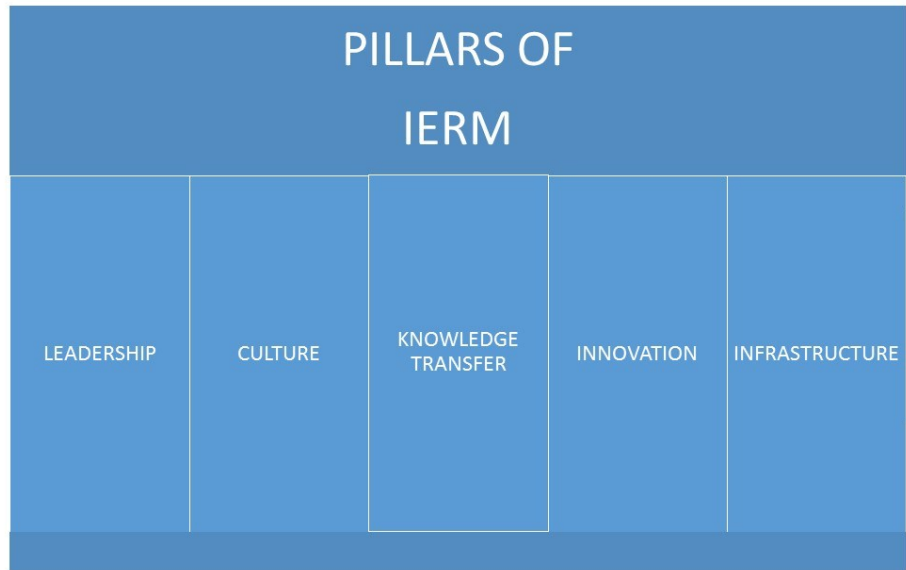


Figure 6 Pillars of IERM (Author, 2017)

6.5 – Stakeholder Collaboration

6.6 – Current levels of industry stakeholder collaboration

The data appeared to suggest that whilst collaboration does occur, only small separate factions of stakeholders within the industry actively collaborate with each other. Some participants argued that, due to a number of reasons discussed further on in this chapter, between fifty and eighty percent of the industry were not actively engaged in collaboration. Seemingly, an “old boys club” exist within the industry, according to the data, consisting of those that have been in it since the early days and those that, perhaps,

are not as actively involved in collaborating with others are the ones new to the industry. Indeed, some interview participants spoke of how they would only collaborate with their builder. However, those that do collaborate do so through formal/informal meetings, exchange days, participating in the standard writing processes and testing new equipment. The data seemed to indicate that unless more collaboration with the stakeholders on the outskirts occurs, the long-term sustainability of the industry may come into question. Whether the stakeholders on the outskirts have any desire to be actively engaged in the industry, this study has on numerous occasions put forth the argument that an incident at one park will impact the rest of the industry. Therefore, it would seem that a clear need exists for stakeholders to engage in collaborating on risk management. As is the case with tourism in general, due to the fragmented nature of the aerial adventure industry containing organisations from various sectors with different views and values (Jiang & Ritchie, 2017), a particularly complex and dynamic environment has been created. It would appear industry-wide collaboration between stakeholders is critical, an argument also put forth by Bramwell (2011). Neither the government on its own, nor a single organisation is capable of successfully solving such complex issues as industry-wide risk management (Saito and Ruhanen, 2017).

6.7 – Benefits of industry stakeholder collaboration

One concern continuously raised throughout the interviews was that of the need for more data on incidents and accidents. Many of the interview participants argued that the one critical resource currently lacking within the industry was true statistical data and that a need existed for a national database to assist the stakeholders in their decision-making on risk management. Indeed, data within the aerial adventure industry seemed so sparse that interview participants were unsure how many states currently regulate the industry. The literature has long recognised the value of knowledge, describing it as the most meaningful resource today (Tzortzaki and Mihiotis, 2012). Essentially, knowledge transfers provide the foundations of collaboration (O’Leary and Vij, 2012) and can lead to innovation and improve operations (Tidd et al., 2005; Shaw and Williams, 2009; Hjalager, 2002). For example, Ulibarri (2015) argued industry-wide stakeholder collaboration opens up the policy process to more ideas, suggestions and different ways of thinking, which may in turn lead to innovative solutions. As argued previously in this chapter, innovation plays a critical role in IERM, hence the clear need seemingly existing for stakeholders to collaborate. As is

becoming clear, effective stakeholder collaboration enables stakeholders to access the resources required to achieve their objectives (Saito and Ruhanen, 2017)

Seemingly, the interview participants argued that collaborating on incident and accident data is key for risk management as it improves decision making for the industry as a whole, as well as the individual stakeholder, thereby acknowledging a mutual dependency on each other. For example, it was argued that one stakeholder's predicament will further the industry as lessons are learned from the data shared, which in turn improves understanding among stakeholders. Some interview participants also encouraged 'exchange days' and third-party inspections to be part of the industry's collaborative efforts. This would further encourage knowledge transfers, whilst also improve best practices by having outside counsel. Further, the data seemingly indicated that the key benefit to industry stakeholder collaboration is knowledge transfers, as stakeholders learn new insights on best practices of risk management. As a result, operations improve through the reduction of accidents and costs. Similarly, Casanueva et al. (2013) argued a key benefit and attraction of KM, and collaboration for that matter, is the pooling together of resources of numerous SMEs, giving larger economies of scale. In point of fact, within the literature it has been argued that knowledge transfers between stakeholders is a critical piece of industry development (Adu-Ampong, 2014). Indeed, when studying the data it seemed that the key terms of collaboration were 'communication' 'education' and 'learning'. The learning leads to improvements, such as innovation, growth and change, which leads to competitiveness which in turn leads to safety, according to the data. This argument finds support within the literature as O'Flynn et al. (2008) argued learning and knowledge transfers leads to innovation and overall improvement collectively as well as individually. Indeed, Trist (1983) argued stakeholder collaboration provides a domain enabling stakeholders to determine strategies enabling the maximisation of everyone's interests.

The data also appeared to suggest overall relationships within the industry improve through collaboration on a B2B and B2G level, with the latter, for example, allowing the industry to influence state regulation, whilst also enhancing mutual understanding between private stakeholders as well as private and public stakeholders. This argument finds support within the tourism literature, with Saito and Ruhanen (2017) arguing that effective stakeholder collaboration helps build networks among stakeholders. Once again,

throughout the data it seemed an understanding of mutual dependency existed between the stakeholders, with a need for the combination of resources to solve the complex problem domain of industry-wide risk management. This perhaps represents a combination of RDT and SET. Interestingly, this point arguably links to Fyall et al.'s (2012: 23) argument that 'there is clearly no one best theory of collaboration', ending their study on the notion that collaboration theories could be combined. Figure six, below, highlights how the two theories relate and combine, in the case of this study, to create the relational resource dependency theory. Similarly, within the literature, Ulibarri (2015) and Adu-Ampong (2014) argued public and private stakeholder collaboration enables the industry to assist in the shaping of policies, an apparent benefit given the knowledge residing within the industry.

With the industry consisting of mainly small-to-medium enterprises, as is the case with the tourism industry in general (Cooper & Hall, 2016), the data also seemed to suggest the pooling of knowledge and resources through collaboration would greatly benefit the industry overall as well as the individual stakeholder. This point finds support within the tourism destination literature, as Zach and Racherla (2011) argued stakeholder collaboration provides a critical strategy for management in regards to leveraging resources and the delivery of individual meaningful experiences. As such, despite collaborating and focussing on the collective, the individual organisation still maintains its individuality. Further, by pooling these resources together, the stakeholders are able to approach complex issues through a holistic point-of-view (Graci, 2013). Similarly, chapter two of this study, found that a holistic approach was required to solving the risk management issues currently existing within the aerial adventure industry, hence the appropriateness of ERM as the chosen risk management framework and the requirement of industry-wide stakeholder collaboration. Czernek (2013) also argued industry-wide stakeholder collaboration leads to the development of competitive advantage, prevents and solves stakeholder conflicts, combines resources and prevents resources deficiencies of the individual organisation. Once again, issues such as isolationism can be overcome through stakeholder collaboration. Mandell (1999) also argued that when faced with a number of complex issues, it is not feasible for industry or society to solve such issues single-handedly, but must do so collectively through collaboration. Through collaboration stakeholders are able to address such complex matters as IERM, as stakeholder collaboration offers a dynamic and flexible process capable of change over time (Jamal and

Stronza, 2009). The ability to change benefits the aerial adventure industry, given the dynamic nature of the industry, particularly in regards to risk management and innovation.

Theory of Collaboration	Motivation
Resource Dependency Theory	<ul style="list-style-type: none"> • Recognition of a resource dependence • A lack of resource(s) (knowledge) exists among the individual stakeholders, motivating them to collaborate and transfer knowledge.
Social Exchange Theory	<ul style="list-style-type: none"> • A recognition of mutual dependency exists. • Stakeholders recognise they need each other to improve industry-wide procedures. They need to pool their knowledge together.

Figure 7. Relational Resource Dependency Theory in the aerial adventure industry

As such, one can deduce the need for stakeholder collaboration to occur at a more integrated level. The industry appears to be suffering from a lack of data, with knowledge transfers not taking place industry-wide, but through a select few. Yet, the data holds key knowledge required by both public and private stakeholders to make informed decisions on risk management. It would seem that a great deal could be learned from the various incidents and accidents undoubtedly taking place within the industry and the data and the literature both argue that sharing these lessons in turn will lead to a better and ultimately safer industry. With an increasing demand for longer, faster and bigger attractions it would seem that industry-wide stakeholder collaboration is essential to maintain the growth and sustainability of the industry.

6.8 – The requirements of and barriers to stakeholder collaboration

A number of requirements for stakeholder collaboration were identified in the data that currently presented the industry with barriers to effective stakeholder collaboration. In particular, the need for trust, respect, listening, honesty, reciprocity, willingness, confidentiality, the appropriate infrastructure, an open mind and a means were subjects that recurred persistently, which were, interestingly, very similar to the issues found on

stakeholder collaboration within the tourism destination management literature discussed in chapter 3 of this study.

According to the data, it seemed that the vast majority of the industry exist somewhat in isolation from the rest, therefore presenting a barrier to collaboration currently. A change of mind-set is seemingly required with interview participants calling for the industry to open up more to each other and being open-minded, thus acknowledging the detrimental impact of isolationism on stakeholder collaboration. Indeed, it seemed the “old boys club” restricted industry-wide collaboration to a certain extent, with some stakeholders appearing to hold more power, or influence, than others due to this existing network. As a result, the data appeared to indicate some levels of power imbalances currently existing within the industry. Participants considered such a collaboration a partnership between industry stakeholders and argued for an ‘in it together’ mentality, arguably insinuating what benefits the industry also benefits the individual stakeholder. Thus, focus on the collective rather than the individual is seemingly required with the common means bringing the industry together being public safety. However, one of the common barriers to effective stakeholder collaboration brought up in the data was that of lack of resources, particularly relating to financial and time. With many stakeholders being small-to-medium enterprises and given the extensive growth taking place within the industry, time appears an even scarcer resource. Much of the collaboration currently taking place appears to occur during the annual ACCT conference, with many stakeholders struggling to attend or take full advantage of the conference due to costs, time and distance.

The data also appeared to advocate for the appropriate infrastructure to facilitate industry-wide stakeholder collaboration, creating a system enabling stakeholders to transfer and receive knowledge confidentially to protect the reputations of their organisations. However, the data seemed to indicate many stakeholders fear collaborating, be it fear of losing intellectual property, losing competitive advantage, losing reputation and getting in trouble by revealing information. Indeed, it appeared that for many industry stakeholders, it was simply not in their culture to share information with each other. As such, mutual trust seemed lacking within the industry. Further, the data also appeared to depict a fragmented industry, with many stakeholders split into separate groups depending on what set of standards they follow.

The requirements and barriers discussed in the data find support within the tourism destination literature. For example, scholars argue that some of the greatest impediments to the success of collaborative outcomes include lack of experience and training of public agency officials, political cultures favouring centralisation of authority, lack of interest from the stakeholders, lack of funds, competition, mistrust, suspicion, and lack of agreement on structures and processes (Wang et al., 2013; Ladkin and Bertramini, 2002). Similarly, scholars from the wider business literature defined the characteristics and skills required of stakeholder collaboration, particularly highlighting trust, honesty, respect, goal alignment, commitment, reciprocity, listening and an open mind (O’Leary et al., 2011; Ansell and Gash, 2008; Emerson et al., 2011). Indeed, Casimir et al. (2012) argued that trust is the essence of collaboration, whilst Wang et al. (2013) pointed out that the impact of trust is critical in regards to the outcome of collaborative processes. Emerson et al. (2011) further stressed the importance of trust, stating that trust leads to mutual understanding between stakeholders, which in turn results in legitimacy and commitment, both of which play critical roles in the long-term sustainability of collaborations. Indeed, Koppenjan and Klijn (2004) argued that trust solidifies relations, encourages learning, innovation and knowledge transfers. As such, Bryson et al. (2015) argues that trust can be built through the sharing of resources, clear communication, transparency, goal alignment and reciprocity, aspects which are all critical to the safety committee. Finally, Provan and Kenis (2008) argued that the right infrastructure and processes are key to the success of collaborations. Like the aerial adventure industry, the tourism industry in general is known for its fragmented state, however, this has led to a recognised need for stakeholder collaboration to improve the tourism product (Waayers et al., 2012; Adu-Ampong, 2014).

The power imbalances seemingly existing within the aerial adventure industry have also been addressed within the tourism literature. Judge et al (1995) for example, found that stakeholders may form powerful coalitions, such as the “old boys club”, within collaborations, meaning participants who are outside these coalitions become less powerful as a result (Judge et al., 1995). Further, power imbalances can impair the less powerful stakeholders’ trust and their ability to share thoughts and experiences in a clear and powerful manner (Vangen and Huxham, 2003). Thus, the existing power imbalances within the aerial adventure industry may also be contributing to the current level of isolationism existing. Whilst, resource dependencies provide a motivation for stakeholders to collaborate, lack of resources, influence and legitimacy resulting in them being co-opted

by a more powerful stakeholder or even left out of the collaborative process altogether (O'Toole and Meier, 2004; Bryson et al., 2015). For example, some stakeholders simply do not have the time, energy, financial resources or people to participate in time-intensive meetings (Ansell and Gash, 2008; Yaffee and Wondolleck, 2003; Purdy, 2012). This is seemingly an issue within the aerial adventure industry, with many stakeholders unable to attend conferences.

As is becoming clear, resource power is a different kind of power to authority and can increase an organisation's influence in the collaborative process as a result (Purdy, 2012), with the less resourceful stakeholders not being fairly represented. Seemingly, this is an issue within the aerial adventure industry in its current state. However, Gulati and Sytch's (2007) work found that encouraging long-term relational dependencies dealt effectively with such power imbalances. Bearing in mind stakeholders within the aerial adventure industry do indeed have long-term relational dependencies of each other, due to their knowledge gained independently, it is possible that power imbalances may not be a considerable, nor long-term, concern. Bryson et al (2006) discovered two main areas of concern over power, namely: assembling stakeholders and controlling the power imbalances of the collaborative process. For example, it is imperative that adequate power is present to assemble the stakeholders, but with the government commonly acting as both the assembler and the stakeholder/participant, Broome (2002) questions its ability to do both effectively. Indeed it may not be beneficial for the government to act as the convenor, if trust issues exist between government and industry and as such it may be more suitable for an organisation like the ACCT or ASTM to act as the convenor. This would be similar to the literature on destination management organisations (DMO) having called for DMOs to take charge and provide leadership in regards to collaborative arrangements (Wang and Fesenmaier, 2007). Nevertheless, leaders encouraging inclusivity should work on power imbalances and discover how to reduce the effect of them as required (Bryson et al., 2015).

Frederickson (2007) argued that the success of stakeholder collaboration is heavily dependent on the stakeholders involved possessing such skills. As a result, committing to collaborating may demand considerable changes to the mind-set of the stakeholders (Putnam, 2004). Further, Araujo and Bramwell (1999) found poor inclusion of key stakeholders in the planning process posed a considerable challenge to successful collaboration, supporting the argument of eradicating isolationism within the industry.

Further, Ansell and Gash (2008) also argued that face-to-face dialogue is an essential requirement of collaboration, an area the industry seems to be somewhat struggling with in its current state, as discussed in the data, thus perhaps presenting a barrier to collaboration. Scholars argued that lack of interest from the stakeholders, lack of funds, competition, mistrust, suspicion, and lack of agreement on structures and processes also presents barriers to collaboration (Ladkin and Bertramini, 2002; Wang et al., 2013). As such, the lack of trust can also present the collaboration with a considerable challenge if it does not already exist (Jamal and Getz, 1995).

Bearing in mind the current trust issues existing within the aerial adventure industry, as put forth in the data, this seemingly emphasises the challenge lying ahead of the industry in establishing industry-wide stakeholder collaboration. Murdock et al., (2005) argued that where a hostile pre-history is present, trust building becomes critical in the early stages. Nevertheless, Yaffee and Wondolleck (2003) argued that weak commitment from various stakeholders may create barriers to industry-wide collaboration. Further, the literature also states that due to limited resources, some stakeholders may not participate in the first place or they may be excluded as a result of their circumstances (Fyall et al., 2001; Naipaul et al., 2009). However, one potential barrier to stakeholder collaboration not discussed in the data are the challenges of ensuring the collaborative arrangement lasts long-term. Bearing in mind the literature and the data recognised the never-ending cycle of risk management, a never-ending collaborative arrangement would seemingly likewise be required. As an example, Ladkin and Bertramini (2002) argued that a considerable constraint to stakeholder collaboration within tourism destinations was the lack of a long-term strategic plan. In light of the never-ending cycle of risk management, the aerial adventure industry would thus need to plan for the long-term as well in regards to collaborating.

Bearing this information in mind, it appears that trust is the foundation of collaboration, providing a stepping-stone to the other requirements of collaboration. Without trust, there is no collaboration and it appeared trust issues and power imbalances within the industry have partially led to the isolationism currently existing. In this sense, the aerial adventure industry seemingly shares many of the barriers to collaboration found in the literature on tourism destination management. As such, the industry in its current state lacks trust and stakeholder engagement with isolationism seemingly presenting the industry with

considerable barriers to collaboration, perhaps due to its relative infancy, and many stakeholders seem to struggle with the bigger picture. Arguably, industry stakeholder collaboration will improve the industry in general as well as the individual stakeholder. The means of the collaboration are clear: improving risk management procedures, an issue that affects all industry stakeholders and thus will benefit private and public stakeholders. Nevertheless, it appears a change of mentality is required within the industry to eradicate the isolationism. Arguably, it would appear that knowledge transfers are, to a certain extent, not a part of the culture within the industry, apart from in smaller groups. It seemed that a cultural problem existed within the industry, consisting largely of trust issues towards fellow industry stakeholders. Indeed, whilst a change of mind-set strongly appears to be in need, arguably the industry needs a cultural shift towards a sharing economy. Bearing in mind the importance of having risk management culturally embedded within the individual organisation, the same would seem apparent at an industry-wide level. Whether these issues stem from the individual personalities within the industry, or more simply represent the norms was not clear. However, motivating and encouraging this change is a challenge.

6.8.1 – Motivating stakeholders to collaborate

Clearly, a number of barriers to stakeholder collaboration exist within the aerial adventure industry. In order to break these barriers, the data suggested the stakeholders existing in isolation needed to be motivated to collaborate. Once again, the necessity of the appropriate infrastructure was apparent, with confidentiality repeatedly stressed. Seemingly, the data suggested many stakeholders have chosen to exist in isolation due to a lack of trust towards their fellow industry stakeholders. Similarly, Waayers et al. (2012) study on a region in Australia recognised trust-building as a critical challenge in motivating stakeholder collaboration. Nevertheless, many participants stressed the importance of collaborating with other stakeholders, the lack of incident data currently existing providing one of the key motivational factors, and thereby, once again, acknowledging their mutual dependency, as put forth in social exchange theory (SET). Indeed, Waayers et al. (2012) argued that a critical challenge in motivating stakeholder collaboration was getting the stakeholders to recognise the shared problem. Nevertheless, the motivational factors put forth by the participants appeared to agree with the findings of Wang and Fesenmaier (2007) who posit stakeholders are motivated to collaborate to increase competitiveness,

learn from each other through knowledge transfers and develop future working relationships. However, it appeared the participants desired “negotiated exchanges” rather than “reciprocal exchanges” as put forth by Coulson et al (2014), thus indicating the desire for a more formal structure. This is perhaps due to the trust issues currently existing within the industry and follows along the argument of Trist (1983) that complex domains require more formalised structuring of a collaborative arrangement.

However, whilst Fyall and Garrod’s (2005) argued that such collaboration would form a network, this may not be the case here, due to the confidentiality required, thus separating stakeholders from each other somewhat. Interestingly, Ladkin and Bertramini (2002) study, within a tourist destination in Peru, also argued that competition for the same resources, in the case of this study, knowledge on incident data, could also provide a barrier to stakeholder collaboration. In other words, whilst stakeholders may be motivated to collaborate due to a lack of resources, it may also present the aerial adventure industry with an impediment. However, the data also appeared to suggest the ACCT or ASTM could provide the infrastructure, which in turn might provide the collaboration with credibility and motivate stakeholders to participate, thus removing the issue of isolationism within the industry, in providing the resource sought by the stakeholders: knowledge. Such an approach finds support in the literature, arguing that a third-party convener may provide the forum or develop the opportunity for collaboration (Hall, 1999; Wang and Fesenmaier, 2007). Indeed, Jamal and Getz (1995) argued that the convener should have characteristics such as legitimacy, expertise, resources and authority. Conceivably, apart from authority, these are characteristics possessed by the ACCT and, or, the ASTM. Collaborating with the public stakeholder would provide authority. Evidently, organisations such as the ACCT and the ASTM have a critical role, as a convenor, to play in facilitating industry-wide stakeholder collaboration within the aerial adventure industry, as acknowledged by Gray (1989). As a result, this is perhaps also where the leadership will come from.

It was argued that resource-sensitive means for collaboration should be developed by creating virtual conferences as well as establishing regional conferences more stakeholders may be encouraged to actively engage in collaborating. For example, Ansell and Gash (2008) argued that balancing the time and effort required to collaborate played a critical role in motivating stakeholders to collaborate. Events such as conferences are key to motivating stakeholders to collaborate, with face-to-face dialogue critical in building trust,

shared understanding and commitment (Emerson et al., 2011; Koschmann et al., 2012; Romzek, 2012). As such, Simmons (1994) argument, that no one technique is sufficient in motivating stakeholder participation, seemingly holds true in the aerial adventure industry as well. Another motivator discovered in the data was that of the encroaching public stakeholder, with some interview participants arguing the ever-present threat of regulation might motivate stakeholders to collaborate. Brown (2002) also recognised this as a potential motivational factor. Further, the data also appeared to suggest combining the standards into one would break-up the current groups of stakeholders seemingly existing. The importance of leadership was also stressed, particularly due to the missing infrastructure, with an apparent need for educated leaders aware of the challenges faced by the industry. The data seemingly asserted that industry leaders needed to reach out to the stakeholders in isolation with an open hand in an accommodating and appreciative manner to motivate them to join the fold.

The data and literature also highlighted a number of other means to motivate stakeholders to collaborate, such as gaining access to resources (Fyall et al., 2000; Pfeffer and Salancik, 1978). A need to collaborate due to the constant innovative changes occurring was further indicated within the data. Similarly, the tourism literature on stakeholder collaboration argued stakeholders may be motivated to collaborate due to swift technical changes in an industry (Bramwell and Lane, 1999), or to reduce risks Fyall and Garrod (2004), thus issues all relevant to the aerial adventure industry. With states becoming more involved in the industry, a resource-scarce industry may be forced to collaborate to manage potential extra regulatory demands, linking an argument also put forth in chapter 3 of this study in regards to resource dependency theory (RDT). Jiang and Ritchie (2017) for example argued RDT posits stakeholders collaborate due to resources being scarce at an individual level, thus needing to collaborate and pool resources together. In the case of this study, the scarce resource is that of knowledge on incident data. However, it is worth pointing out the potential for power imbalances in this case, bearing in mind the insurance providers hold the incident data sought by the rest of the industry, thus being in a position of power (Hillman et al., 2009). In this case, leadership becomes critical in reducing power-resource-knowledge imbalances (Jiang and Ritchie, 2017). Indeed, whilst the data only discussed leadership as a requirement, one could also argue it represents a motivational factor in gathering stakeholders. This point is further explored in section 6.8.3 of this chapter. Motivating the insurance providers to participate in the collaboration, and thereby provide

it with validity and purpose, could be a challenge, despite the data indicating it being possible. Nevertheless, infrastructure encouraging industry-wide collaboration seems missing or insufficient, with a need for further development clearly existing. The combination of industry standards would also benefit the industry. Seemingly, by providing the required infrastructure and combining standards, the benefits of collaborating would outweigh the costs, thus encouraging stakeholders to leave the isolationist stance and collaborate, in line with SET (Fyall et al., 2012). Once again, it would appear that, in regards to this study, the two theories of RDT and SET could be combined to reflect the relational and resource dependencies evidently existing within the aerial adventure industry, thus creating a relational resource dependency theory framework.

6.8.2 – Public stakeholder industry experience

One of the motivations behind participating in industry-wide collaboration discussed above was that of the increasing involvement of public stakeholders. The data seemed to suggest the increase of regulatory requirements put forth by a number of states would force stakeholders to collaborate. However, the level of industry-specific experience of the public stakeholder also appeared to be an issue among some of the interview participants. It seemed that some states merely incorporated a rubber stamping process or misclassified the industry as amusement rides, as they struggled to understand the activity. As such, it appeared some public stakeholders struggled to regulate the industry as they did not possess enough knowledge or understanding of the activity, whilst also lacking organisation, evidenced in one state publishing two sets of regulations simultaneously. Some interview participants also spoke of states not listening to the industry and therefore making mistakes in their regulations and having to substantially modify them several times. Seemingly, some public stakeholders were actively engaged in collaborating with their local private stakeholders, whilst others went for more autocratic approaches to regulation. Once again, it was argued that trust and listening were key for collaboration to succeed. The data seemed to suggest a compelling need exists for public and private stakeholder collaboration enabling industry to educate and advise the public stakeholder and vice versa. Adu-Ampong (2014), for example, argued that public and private stakeholder collaboration will help ensure collaborative arrangements succeed. Similarly, Ruhanen (2008) and Cooper (2006) points out that by utilising the collective knowledge of an industry, combined with the knowledge created by scientists and governments, the long-

term sustainability and success of the industry can be achieved. However, Ladkin and Bertramini (2002) argue that some of the greatest impediments to the success of collaborative outcomes include lack of experience and training of public agency officials. Perhaps somewhat alarmingly, Halme's (2001) study found that when public stakeholders dominate collaborations, they generally maintained a patronising approach to information dissemination. Similarly, Wang et al (2013) argued if the public stakeholder was to demand it maintain control and power, it would very likely lead to a lack of interest in collaborating from the private sector, which could present the aerial adventure industry with another impediment to stakeholder collaboration.

Given the infancy of the aerial adventure industry it is perhaps not surprising that some public stakeholders lack experience in dealing with the industry. Indeed, the literature and the data both call for collaboration between public and private stakeholders. The data indicated a desire from the industry to take part in the regulating of the industry and it seemed many public stakeholders were actively involved in collaborating with their local private stakeholders in an attempt to understand the industry. In some cases the public stakeholder lacks the required knowledge and experience to effectively regulate the industry and therefore must reach out to the industry, as some have, to gain knowledge and experience about the activity. They could earn industry-approved certification, for example, as a measure to gain the required knowledge and experience. In regards to the industry, with public stakeholders increasingly regulating the industry it is surely in the industry's best interest to collaborate with them on it in an attempt to shape the discussion. Nevertheless, the appropriate infrastructure encouraging such collaboration seems missing.

6.8.3 – The importance of leadership in collaboration

The data indicated a need for effective leadership to facilitate the collaboration. Seemingly, leadership is key in motivating stakeholders to collaborate by listening to the base of the industry and selling a collective vision for the industry, which in this case is public safety. Further, effective leadership was depicted as consisting of a multitude of responsibilities, including getting the stakeholders to buy in, through selling a vision as well as creating and setting the appropriate culture behind the collaboration, whilst also stressing the need for leadership to be educated in the challenges of the industry. Indeed, the data argued for

someone or something to provide the means, which in turn would motivate and encourage stakeholders to participate. As is the case with the tourism destinations in general, the aerial adventure industry clearly lacks control by any one group or individual (Jamal and Stronza, 2009). For example, within the aerial adventure industry, advocacy groups exist, such as the ACCT or ASTM, yet no single organisation controls the industry. Similarly, Fyall et al. (2003) argued that visionary leadership is essential to motivating stakeholders to collaborate within DMOs, once again highlighting the similarities of requirements and barriers to stakeholder collaboration between DMOs and an industry. Doing so successfully would in turn dispel the issue of isolationism. Indeed, the literature recognises the part leadership plays in dispelling stakeholder isolation, arguing that the onus is on the leadership to encourage inclusivity, providing committed and impartial leadership across boundaries (Bryson et al., 2015; Emerson et al., 2011). Further, scholars argue that leadership is essential to developing, maintaining and managing collaborations (Conner, 2015; O'Toole, 2015). The capability of managing power-resource-knowledge imbalances is another role of effective leadership and is important to the success of the collaborative process, which can be achieved through empowering and representing weaker stakeholders (Jiang and Ritchie, 2017).

Within the tourism destination literature, leadership has also been recognised as a critical element of facilitating knowledge transfers between industry stakeholders (Czernek, 2013; Scott et al., 2008), creating the channels and initiatives where knowledge transfers can take place (Donato and Pablo, 2015), thus once again stressing the need for effective leadership within the aerial adventure industry. Selin and Chavez (1995), for example, recognised it as one of the antecedents of stakeholder collaboration. Indeed, Von Krogh et al (2012) warned the wrong type of leadership could lead to knowledge hoarding, an issue clearly existing within the industry in its current state. Further, Teece (2009) also argued the onus is on the knowledge-oriented leader to prioritise knowledge transfers within the industry to unearth opportunities to innovate. Bearing in mind the importance innovation plays in effective risk management, as discussed on a number of occasions within this study, this point further stresses the critical role industry stakeholder collaboration has in achieving industry-wide effective risk management. As such, Ansell and Gash' (2008) argument that the collaborative process is unlikely to succeed without effective leadership appears valid, due the number of responsibilities residing with the leadership. However, some interview participants also spoke of a potential need to mandate collaboration through organisations

such as the ACCT, whilst arguing that as more and more states begin to regulate the industry, stakeholders will be forced to come in from the cold.

With isolationism existing among some stakeholders and others stuck in different groups presenting the industry with apparent issues clearly detrimental to achieving successful industry-wide stakeholder collaboration, the aerial adventure industry seems in need of leadership to gather stakeholders and motivate industry-wide collaboration. Indeed, the data as well as the literature argued that without effective leadership, industry-wide stakeholder collaboration is unlikely to succeed. Leadership is evidently required to facilitate stakeholder collaboration in the same manner it represents one of the pillars of IERM. As such, if leadership is an essential part of motivating stakeholders to collaborate and trust is a key element of stakeholder collaboration, arguably the two cannot exist without each other if collaboration is to succeed. It is likely the leaders already exist within the industry, though it seems a coordinated effort is currently missing. Seemingly, the industry leaders need to convene to establish a combined leadership effort clearly required to, not only, motivate industry-wide collaboration, but also facilitating and maintaining it in the first place. Bearing this in mind and the importance leadership plays in IERM, the role clearly cannot be downplayed, meaning effective leadership for the CIRM becomes a requisite to ensure industry-wide stakeholder collaboration takes place and thereby improves risk management procedures.

6.9 – Collaborative Industry Risk Management

The lack of appropriate infrastructure encouraging industry-wide stakeholder collaboration on risk management was an issue repeated throughout the participant interviews. This chapter has also paid much attention to the apparent lack of knowledge transfers on incident and accident data within the industry with some sort of organisation needed to facilitate the transfer of knowledge. The data seemed to indicate a need and a desire for a safety committee and something similar to SaferParks to disseminate this knowledge. Indeed, the European Ropes Course Association (ERCA) has something similar called Incident Log Reports (ERCA, 2017). It was argued that such a committee could provide the missing infrastructure and facilitate learning, communication, innovation and improvement, all areas sought in collaboration. Such a committee could seemingly assist in the education of stakeholders, whilst also highlight areas of improvement in the industry

due to the data. The data appeared to suggest a safety committee could provide a central knowledge hub for the industry, one of the key requirements in motivating stakeholders to collaborate. The creation of a safety committee is supported by Annas (2016), whilst it is a common part of ERM (Fraser and Henry, 2007). However, the importance of confidentiality was, once again, stressed and others warned against simply creating another organisation, such as the ACCT or the ASTM. Yet, the data argued the ACCT and/or the ASTM could provide the setting for the safety committee, presumably as an extension of either or both organisations, instead of creating new group, similarly to the actions taken by ERCA mentioned above. As such, it was argued that the ACCT or ASTM both possess the means to form such a committee.

To summarise, IERM provides the aerial adventure industry with a comprehensive risk management tool, putting in place the appropriate infrastructure and procedures to effectively manage risk. An essential part of that is the establishment of a safety committee, centralising all risk management procedures within the aerial adventure industry, providing the industry with knowledge on incidents and accidents as well as educating its stakeholders. SaferParks offers an essential knowledge transfer tool between the committee and the industry, ensuring the anonymity of the stakeholders involved is always maintained. Such a tool may, in turn, somewhat by-pass the issue of trust within the industry and thereby dispel the isolationism currently existing as the stakeholders would not be directly collaborating with each other, but instead do so through the safety committee and SaferParks at a confidential level. The industry already consists of organisations with the means to establish such a committee, with similar set-ups at the standard-writing organisations of the ASTM and ACCT. However, it may be necessary for the standard organisations to merge to streamline the standards and thereby the safety committee, in an attempt to gather all industry stakeholders.

6.10 – The Safety Committee Life Cycle

The continuous innovation taking place within the industry may also impact the safety committee and stakeholder collaboration. In light of the ceaseless risk management and innovation cycles, a need for a continuous approach to collaboration is seemingly needed to maintain its life cycle. However, a long-term approach to industry-wide stakeholder collaboration is a complex matter, hence the need for a safety committee. Indeed, Jamal

and Getz (1995) called for the establishment of an organisation to continuously monitor and re-evaluate the collaborative efforts. Selin and Chavez (1995) introduced “An Evolutionary Model of Tourism Partnership”, a life cycle model of five phases, including a feed-back loop, namely: antecedents, problem setting, direction setting, structuring and outcomes. They acknowledged that stakeholder collaboration may cease at the “outcomes” stage if the purpose had been fulfilled or, somewhat ominously, if the problem was still unsolved. However, the re-evaluation cycle of Selin and Chavez’ (1995) model may also lead to a broadening of scope. Nevertheless, given the continuous cycle of risk management and innovation within the aerial adventure industry, it is also possible neither of these outcomes may occur as the safety committee continues its focus on disseminating knowledge to the industry stakeholders. Indeed, Caffyn’s (2000) tourism partnership life cycle found six stages of a typical collaborative arrangement within tourism: pre-partnership, take-off, growth, prime, deceleration, and continuation or ‘after-life’ options, in which she recognised the likelihood of a collaborative arrangement simply continuing its work due to a never-ending purpose. However, clearly, continuous re-evaluation would seem a requisite to ensure the safety committee remains credible. Introducing a new framework, a combination of Selin and Chavez’ (1995) and Caffyn’s (2000) life cycles, would therefore seem appropriate for this study.

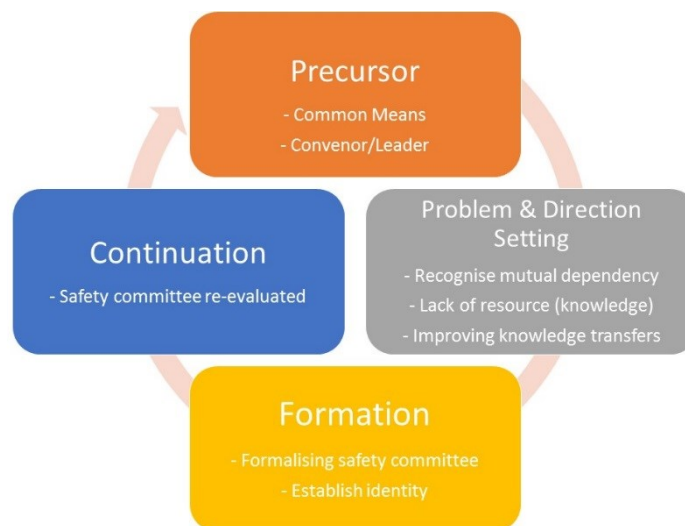


Figure 8. Safety Committee Life Cycle

Bearing this in mind, figure 8 depicts the proposed life cycle of the safety committee, a model based largely on the works of Selin and Chavez (1995) and Caffyn (2000). The first stage, precursor alludes to the existence of a common means, a requisite for stakeholder collaboration to take place, as well as a convenor and leader to sell the vision of the common means and gather the key stakeholders. During the second stage of problem and direction setting, the stakeholders recognise their mutual dependency, in the case of improving industry-wide risk management procedures, whilst also recognising the lack of resources existing in the industry in regards to knowledge on incident data, for example. As a result, the stakeholders set out to improve knowledge transfers within the industry. The “formation” stage therefore involves formalising the safety committee and establishing its identity, its purpose with roles assigned and the goals set. Finally, the safety committee is re-evaluated in the “continuation” stage to ensure it is continuously relevant, meaning the cycle is never-ending as long as the conditions in the previous stages exist. The continuation stage further links back to Reid et al.’s (2008) argument that collaborative outcomes must be evaluated on a long-term basis.

Chapter 7

7.0– Conclusions and Recommendations

The aim of this study was to advance the knowledge and understanding of collaboration theory and risk management, and thereby develop a collaborative risk management framework to portray how stakeholder collaboration could lead to effective risk management in the aerial adventure industry. To achieve the aim, five objectives were devised:

1. Investigate and ascertain the main challenges of risk management within the aerial adventure industry including maintaining the balance between perceived and actual risks, perception issues, demand and leadership.
2. Explore and establish the value of public, private and third sector stakeholders collaborating to achieve effective risk management focussing on trust issues, leadership, motivations benefits and barriers.
3. Establish the suitability of IERM in the aerial adventure industry by exploring current risk management practices as well as desires to improve on such within the industry.
4. Explore and establish the requirements and barriers for industry-wide collaboration within the aerial adventure industry, with a particular focus of the thoughts of management representing private as well as public stakeholders.
5. To propose a framework to enhance the management of risk on an industry-wide basis using a collaborative approach with a focus on knowledge transfers between industry stakeholders and a safety committee.

Further, six research questions (RQ) were also formulated:

1. What role does perceived risk play in achieving effective risk management?
2. How can IERM achieve effective risk management in the aerial adventure industry?
3. How can stakeholders within the aerial adventure industry collaborate to develop effective risk management procedures?

4. What role do knowledge transfers play in connecting stakeholder collaboration and IERM?
5. What role does leadership play in initiating and motivating industry-wide stakeholder collaboration?
6. What are the requirements for achieving industry-wide stakeholder collaboration within the aerial adventure industry?

Bearing these in mind, a comprehensive literature review was undertaken focussing on the aerial adventure industry, adventure tourism, risk management, operational risk management, enterprise risk management, stakeholder collaboration and management and knowledge management.

To achieve the aim of the study, the methodology was guided by a qualitative single case study, focussing specifically on the US aerial adventure industry. This design was chosen to gather in-depth data on few cases. 20 interviews were conducted with the sampling guided by Mitchell et al.'s (1997) theory of stakeholder identification and salience as well as the research questions. As a result, the key industry stakeholders approached for the study were operators, builders, public stakeholders, standard writers and engineers. Whilst, one obvious stakeholder was left out, the participant, it was determined the issue of the uneducated consumer justifies leaving that particular stakeholder out, whilst also bearing in mind the public stakeholder represents the interests of the general public, thus the participants. The interviews were analysed using thematic analysis, discovering two codes within the data, risk management and stakeholder collaboration, as well as twenty-three themes that were discussed extensively in chapter 6 of this study. The objectives set forth provide a guide to the remainder of this final chapter as the study is concluded.

7.1 – Conclusions – achieving the objectives

7.1.1 - Investigate and ascertain the main challenges of risk management within the aerial adventure industry including maintaining the balance between perceived and actual risks, perception issues, demand and leadership.

The literature review in chapter 2 of this study found a never ending struggle within the aerial adventure industry in the pursuit of effective risk management as the industry is faced by a number of challenges. Like adventure tourism in general, a risk management framework is missing, yet highly required. Evidently, as an activity the industry has the potential to pose high levels of risks to participants as well as staff, be it physically and, or emotionally. Indeed, as is the case with most adventure tourism visitor attractions, risk appeared to be the main ingredient of the activity. Nevertheless, an appropriate framework to manage this has up until now seemed elusive. The main challenge faced by the industry would appear to be maintaining the balance between perceived risk and actual risk. Participants do not wish to face actual danger, yet still expect a thrilling and exciting experience. Further, as the industry aims for high throughput of participants, yet the main bulk of participants are uneducated in the activity, the industry is faced with a critical challenge. As a result, the onus is on the industry to create an illusion of risk, essentially managed risk. Thus, the industry is continuously faced with a conundrum as it tries to maintain the balance between perceived risk and actual risk, yet this balance is critical for the immediate and long-term sustainability of the industry. The literature also depicted a heavily self-regulated industry, with a number of safety standards available, though followed somewhat voluntarily, and thereby presenting the industry with another challenge to risk management. As a result, the literature review discovered a call for the combination of these standards.

In turn, the data indicated an industry struggling with its own success and as a result creating further challenges to risk management. The aerial adventure industry clearly shares many of the key characteristics of adventure tourism, thus justifying this study classifying it as an adventure tourism visitor attraction. Nevertheless, and unlike some of the literature on adventure tourism, some levels of inherent risk do indeed exist within the aerial adventure activity. This is, perhaps, somewhat surprisingly, given the notion of illusion of risk being a mainstay within the adventure tourism literature, particularly on the

commercial side. Whilst, the majority of the experience on aerial adventure parks is comprised of illusions of risk, it has become clear that these illusions are managed risks and that some levels still exist, to a certain extent, though this might change as the industry evolves. This is, in particular, due to the role played by the participant. As a visitor attraction, aerial adventure parks still place a lot of emphasis on co-creation levels between participants and staff. Unless this changes, and it has been changing, some levels of inherent risk will always be present. Nevertheless, the industry's understanding of risk is also different from the adventure tourism literature, painting a mixed picture of negativity and positivity. Essentially, the connotations of risk are that of a hybrid version, knowing that actual risk is bad, but reaching the level before the risk becoming a reality is ideal.

Having undergone, and continuing to do so, incredible growth and change in a short space of time, industry stakeholders are under pressure to continuously deliver ever-changing and improving experiences to provide more thrills, faster zip lines and bigger parks. As a result, the industry is looking toward innovation to solve this enigma. However, whilst innovation has improved safety measures it has also introduced new challenges to risk management through the introduction of new products or using old products in new innovative ways, thus creating a never-ending circle in the pursuit of perfection. As a result, this study discovered a number of challenges to risk management, challenges that required stronger leadership and improved infrastructure to facilitate and encourage knowledge transfers. Indeed, whilst the concept of innovation was mentioned in the literature review chapters it had not been considered for the interview guide until after the third interview, when it was obvious innovation played a critical role in risk management. At this point it became clear that innovation provided answers to many risk management issues within the industry, yet also created new issues, an area not covered in the literature review. Likewise, the importance of infrastructure had been discussed in the literature review chapters and its importance was apparent within the data, yet it emerged that the right type of infrastructure was required for stakeholder collaboration and IERM to succeed. The current type instead seemed to act as a barrier due to the many standard writing organisations essentially splitting the industry into groups.

7.1.2 - Explore and establish the value of public, private and third sector stakeholders collaborating to achieve effective risk management focussing on trust issues, leadership, motivations, benefits and barriers.

The literature review indicated a need for stakeholder collaboration due to the fragmented state of the aerial adventure industry, with many stakeholders being SMEs, meaning resources are limited. However, collaboration offers a remedy to such deficiencies by enabling industry stakeholders to pool resources, such as knowledge and experience, of individual stakeholders together to create greater economies of scale. As a result, the focus of the study on an industry, rather than the individual stakeholder was justified. By improving risk management procedures collectively, the industry improves as a whole. The pooling of resources is encouraged and facilitated by the aforementioned safety committee. Indeed, RDT and SET were briefly explored in chapter 3 to further understand why and how stakeholders collaborate and found a lack of resources and mutual dependency to be critical motivations, which was later found to be the case in the data as well. Bearing this in mind, chapter 6 argued for the combination of RDT and SET to propose the relational resource dependency framework. Further, numerous challenges in motivating stakeholders to participate, such as trust, a means, leadership, common understanding, resources and power imbalances have been outline in this study, with a requirement for sufficient incentives must be provided to encourage industry-wide participation. Evidently, the implementation of IERM is complex and heavily reliant on stakeholder participation. Indeed, for the safety committee to be successful, this study has argued, all stakeholders are required to be actively engaged with a similar mind-set towards the purpose of collaboration to ensure the outcome is a reflection of the industry. This study found active participation to be an issue within the industry, estimating 50-80% are not actively engaged in stakeholder participation.

As such, the industry stakeholders need to agree upon the aim and objectives of the safety committee, requiring stakeholders to have the same end-goal. As a result, this study has outlined the importance of stakeholder management in ensuring stakeholder collaboration is successful. By combining the knowledge and experience of industry stakeholders through knowledge transfers between the individual stakeholder and the safety committee, risk management procedures improve on a collective basis, rather than individually. This, in turn, strengthens the long-term sustainability of the industry, knowing that an accident

affects the industry as a whole and not simply the individual organisation directly affected. The value of public, private and third sector stakeholder collaborating on risk management therefore lies in improving the overall risk management procedures and thereby improving the overall long-term sustainability of the industry, which in turn improves the long-term sustainability of the individual stakeholder. As a result this study has argued effective leadership of the safety committee becomes critical. It became apparent that it is through effective leadership that barriers to collaboration, such as trust, are removed or marginalised. Bearing this in mind, this study further contributes to theoretical knowledge through the use of stakeholder collaboration to improve risk management procedures on an industry-wide basis. The literature has yet to focus on the importance of stakeholder collaboration to improve risk management procedures and has yet to use a collective industry-wide approach to risk management, with research focussing on the individual organisation instead.

The importance of stakeholder collaboration in regards to IERM has been put forth throughout this study. Whilst some levels of collaboration do occur in the aerial adventure industry, it seemed to only take place in small factions. Further, the levels of collaboration occurring do so in an unstructured manner due to an “old boys club” existing and newcomers being less engaged, as well as the industry being split into various groups depending on what standard they follow. However, stakeholders within the industry acknowledge the long-term sustainability of the industry may come into question if the stakeholders on the outskirts of the industry are not encouraged to participate in collaboration, thereby acknowledging a mutual dependency. With the aforementioned wider impact of incidents and accidents established, a clear need exists for industry stakeholder collaboration.

A number of benefits to collaboration have been put forth in this study. On numerous occasions this study has indicated concerns over the lack of data within the aerial adventure industry, with a clear need for a national incidents and accident database to assist the industry in decision-making on risk management existing. Indeed, industry stakeholder collaboration is key to risk management, improving the industry and thereby the individual stakeholder as well, as lessons are learned and shared from the data. The proposed CIRM Group would provide such a database. As such, knowledge transfers provide the foundation of stakeholder collaboration as well as risk management, providing

the link between the two. Through knowledge transfers stakeholders learn new insights on best practices. This study has argued the learning taking place through knowledge transfers leads to improvements, which leads to competitiveness, which finally leads to competitiveness, see figure 9, below. Further, interrelationships between the various stakeholders also improve at B2B and B2G levels. Due to the make-up of the industry mainly consisting of SMEs, another benefit of stakeholder collaboration in the aerial adventure industry emanates from the pooling of resources, bringing greater economies of scale, whilst also solving the resource issue in regards to the lack of knowledge pertaining to incident data at an industry-level. Yet, as a result of the demand currently existing as well as the need for incident and accident data within the industry, industry-wide stakeholder collaboration is essential to maintain the long-term sustainability of the industry.

BENEFITS OF STAKEHOLDER COLLABORATION

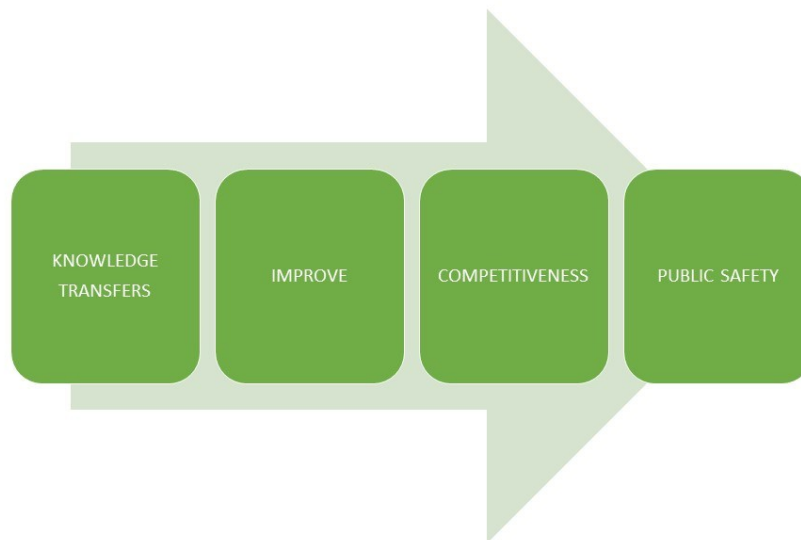


Figure 9. Benefits of Stakeholder Collaboration (Author, 2017)

7.1.3 - Establish the suitability of IERM in the aerial adventure industry by exploring current risk management practices as well as desires to improve on such within the industry.

This study has revealed an aerial adventure industry growing at a considerable pace with continuous innovation taking place to improve the participant experience. However, the industry's paradoxical relationship between risk and safety was also highlighted, indicating a demand for "safe risk", with industry stakeholders attempting to deliver on the consumers' desires for thrill and adrenaline rush. Yet, as neither parties wish to experience actual danger a paradox evidently exists within the industry. The industry instead relies on creating an illusion of risk by eliminating some risks, whilst mitigating others. Indeed, this study found the illusion of risk to be critical to the aerial adventure industry. However, in many cases, the perceived risk also provides actual risk, meaning effective risk management becomes a requisite. Nonetheless, with a string of serious accidents occurring in a short space of time and the nature of the activity in itself, numerous challenges exist to effective risk management within the aerial adventure industry, with risk-levels to a certain extent walking hand-in-hand with the activity as various stakeholders desire faster, longer, bigger attractions, yet do not wish to face actual danger. As a result, a need exists for a different approach to risk management. Given the fragmented state of the industry, a need for a more comprehensive approach to risk management, focussing on the industry as a whole, rather than the individual stakeholder, is required. Despite aerial adventure parks becoming uniform, the risk management procedures have not, with four different industry standards available to adhere to and thus splitting the industry into separate groups. Nevertheless, this study has argued an accident at one park will affect the entire industry, hence the need for Industry-wide Enterprise Risk Management (IERM). As a result, this study has identified a need for an open mind-set within the aerial adventure industry in regards to risk management, arguing for a collective industry-wide approach instead of an individual approach.

The aerial adventure industry is attempting to find the answers to its risk management challenges through innovation, whilst also continuing to satisfy demand. However, the innovation is subsequently leading to further issues and thereby creating a never-ending circle in the pursuit of perfection. With an all-encompassing holistic approach to risk management, effective leadership as well as appropriate infrastructure encouraging

knowledge transfers required within the aerial adventure industry, the industry-wide implementation of enterprise risk management (IERM) is the ideal solution to the risk management challenges faced by the industry, as argued in chapter two of this study. Some interview participants were already engaged in similar risk management systems, albeit internally. Despite traditionally being a financial risk management tool focussing on the individual organisation, the challenges faced by the aerial adventure industry, as a whole, are addressed by IERM, be it through the establishment of a safety committee encouraging knowledge transfers between the stakeholders and the appointment of a Chief Risk Officer (CRO) to provide leadership and thereby offering an organised industry-wide approach to an industry-wide problem. IERM provides the holistic, all-inclusive approach to risk management desired by the industry, as discovered in the data, and encourages stakeholder collaboration through the safety committee. As such, the focus becomes on the collective rather than the individual, knowing that incidents and accidents at one park will have a wider negative impact on the rest of the industry

Bearing this in mind, two key contributions of this study were found in the suitability of IERM in the aerial adventure industry. A clear gap in the knowledge has previously existed in the utilisation of ERM outside of finance and the literature had traditionally focussed on the single organisation, rather than an industry as a whole. As such, this study has established the applicability of ERM in the aerial adventure industry, from the primary data, whilst shifting the focus to industry, thereby creating IERM. These, in turn, provide the literature with two key contributions, whilst also achieving the third objective of this study.

7.1.4 - Explore and establish the requirements and barriers for industry-wide collaboration within the aerial adventure industry, with a particular focus of the thoughts of the management representing private as well as public stakeholders.

Objective number four of this study revolved around exploring and establishing the requirements and barriers for industry-wide collaboration within the aerial adventure industry. The literature review and data indicate that, like tourism destinations, stakeholder collaboration within the aerial adventure industry is a requisite given its fragmented and dynamic nature. Twenty semi-structured interviews were carried out involving senior managers representing private as well as public stakeholders. This study

found a number of requirements for industry-wide stakeholder collaboration with trust, respect, listening, honesty, reciprocity, motivation, confidentiality, the appropriate infrastructure, an open-mind and a means the most prominent during the interviews. This study further devised a new framework, the relational resource dependency framework, describing the motivations behind collaboration within the aerial adventure industry. This framework consists of a combination of social exchange framework and the resource dependency framework. In chapter six it was discovered that stakeholders recognised the need for collaborating to get access to knowledge, such as incident data. Such knowledge was further acknowledged to be considerably scarce at an individual level, hence the need for collaboration. However, it became clear that mutual trust between the stakeholders was critical for any industry-wide collaboration to take place, with trust providing a stepping-stone to the aforementioned requirements. Yet, mutual trust seemed largely missing within the aerial adventure industry for a number of reasons, which instead seemed to have led to a state of isolationism with individual stakeholders either keeping to themselves or sticking to certain groups.

The fragmented state of the industry also provided a considerable barrier to industry-wide stakeholder collaboration, as stakeholders appeared split into separate groups depending on what standard they followed and perhaps had less trust towards other stakeholders residing outside those groups. As such, trust came across as providing a great barrier to industry-wide stakeholder collaboration within the aerial adventure industry and the resulting stakeholder isolation being further detrimental to the likelihood of collaboration being a success. Further, the lack of trust existing within the industry appeared to walk hand-in-hand with another barrier to collaboration, fear. Due to the lack of trust, stakeholders appeared to fear losing intellectual property, competitive advantage and wanted to protect their individual reputations, hence fearing the concept of collaborating with each other, meaning confidentiality became a requisite for collaboration to succeed within the industry. Given the make-up of the industry largely consisting of SMEs, other barriers also played a role, such as time and resources, common barriers nevertheless in tourism. Indeed, the most common gathering point for the industry was the annual ACCT conference, though many struggled to attend due to finances and time. As a result, the need for regional and virtual conferences became apparent. Further, it seemed the “old boys club” restricted industry-wide collaboration to a certain extent, with some stakeholders appearing to hold more power, or influence, than others due to this existing

network. As a result, the data appeared to indicate some levels of power imbalances currently existing within the industry, meaning participants who are outside this network become less powerful as a result. In return, it is likely this power imbalance has had a negative impact on the less powerful stakeholders' trust and their ability to share thoughts and experiences in a clear and powerful manner. Thus, the existing power imbalances within the aerial adventure industry may also be contributing to the current level of isolationism existing.

Resource power is a different kind of power to authority and can increase an organisation's influence in the collaborative process as a result, with the less resourceful stakeholders not being fairly represented. Seemingly, this is an issue within the aerial adventure industry in its current state, with a need for long-term relational dependencies within the industry to deal with these power imbalances. Bearing in mind stakeholders within the aerial adventure industry do indeed have long-term relational dependencies of each other, due to their knowledge gained independently, it is possible that power imbalances may not be a considerable, nor long-term, concern. Nevertheless, effective leadership is required to, first, convene the stakeholders and then control the power imbalances. However, with a lack of industry experience, this study has found it may not be beneficial for the government to act as the sole convenor, as trust issues exist between government and industry and as such it may be more suitable for an organisation like the ACCT or ASTM to act as the convenor along with the government. This would be similar to the literature on destination management organisations (DMO) having called for DMOs to take charge and provide leadership in regards to collaborative arrangements (Wang and Fesenmaier, 2007). Nevertheless, leaders encouraging inclusivity should work on power imbalances and discover how to reduce the effect of them as required, considering fair representation being key to the long-term success of the safety committee. However, the industry also seemed to lack certain levels of leadership required to gather the complete industry. Whilst, it was apparent that some levels of leadership existed, particularly through the various standard-writing organisations, said leadership also fed the fragmentation of the industry due to their representing different organisations, making the gathering of all stakeholders further complex.

Bearing this in mind, it seemed that a change of mind-set was required within the industry to eradicate the isolationism currently existing. Indeed, it appeared that the industry

suffered from a cultural barrier to collaboration and needed a shift towards a sharing economy, in respect to improving risk management procedures, with a focus on the collective rather than the individual stakeholder. Getting the individual stakeholder to understand the importance of improving risk management procedures industry-wide appeared imperative, knowing that a healthier and sustainable industry most likely also meant a healthier and more sustainable organisation. It seemed many within the industry failed to understand this and thus failed to see the bigger picture, failing to see the benefits of a sustainable industry. Thus, in the same sense that risk management should be culturally embedded within the individual organisation, so it should at industry level. Further, the appropriate infrastructure to facilitate industry-wide collaboration and confidential knowledge transfers also seemed lacking within the industry to a certain extent. Certainly, the requirements for industry-wide collaboration seemed to exist within the aerial adventure industry, but not at sufficient levels to involve the complete industry. As an example, the industry consisted of unstructured structures, having organisations providing standards for the industry to follow and providing gathering points. Yet, this also led to the aforementioned fragmentation, due to the multitude of said standards. Similarly, with the industry looking toward these standard-writing organisations for leadership, having numerous of these organisations in turn also created further barriers to industry-wide stakeholder collaboration with no single, clear message nor gathering point existing, making the eradication of isolationism extremely complex. Indeed, in chapter six leadership was found to be crucial to the facilitation of industry-wide stakeholder collaboration and to eradicate the isolationism currently existing. As such, this study found leadership to be a requisite in establishing trust among the stakeholders, providing the common means and providing the infrastructure required to collaborate effectively. Bearing this in mind, the leadership required would likely come from organisations such as the ACCT or the ASTM.

Therefore, organisations such as the ACCT or ASTM appear ideal candidates to also provide the infrastructure, whilst they would, once again, add much needed leadership and credibility to the collaboration, thereby motivating stakeholders to participate. These organisations possess the required leadership characteristics such as legitimacy, expertise and resources. Collaborating with the public stakeholder would provide the authority currently lacking. However, to streamline the process, combining the standards is a requisite in order to break-up the separate groups in the industry and connect the fragments. Once again, a change of mind-set is required within the industry, focussing on

bringing the stakeholders on the outskirts in with an open hand, listening to the base of the industry and selling a collective vision. Further, stakeholders may also find motivation to collaborate in the increasing involvement of the public stakeholder in many cases forcing stakeholders to collaborate. However, a critical issue in this case is the lack of industry-specific experience of the public stakeholder often leading to a rubber stamping process among some states or misclassifying the activity as they struggle to understand the activity. Despite a lack of knowledge and experience, some states disregard assistance from the industry. However, a need clearly exists for public and private stakeholder collaboration, enabling the industry to educate and advise the public stakeholder and vice versa. As such, leadership, trust and listening once again become key motivating factors for the collaboration to succeed.

7.1.5 - To propose a framework to enhance the management of risk on an industry-wide basis using a collaborative approach with a focus on knowledge transfers between industry stakeholders and a safety committee.

Despite its relationship with risk, adventure tourism lacks a risk management framework and so does the aerial adventure industry. With risk being the main ingredient of the activity, such a framework thus becomes a requisite. Yet, the lack of appropriate infrastructure within the aerial adventure industry encouraging industry-wide stakeholder collaboration on risk management has been highlighted on numerous occasions in this study. Further, little to no knowledge transfers on incident and accident data currently takes place, with a need for an organisation to provide the appropriate infrastructure to facilitate this. This study has discovered a need and a desire for a safety committee as well as a distribution outlet akin to SaferParks within the aerial adventure industry to disseminate knowledge. By combining the two theories underpinning this study, collaboration and enterprise risk management, the arrangement in the aerial adventure industry could be referred to the Collaborative Industry Risk Management (CIRM) Group, as put forth in chapter 3, reflecting the focus on industry. The CIRM Group would provide the missing infrastructure, facilitate learning, knowledge transfers, innovation and improvement, all areas sought in collaboration. The group would further provide a central knowledge hub for the industry, a key motivating requirement for the stakeholders. SaferParks could be referred to as Safe Adventure, referring to the paradoxical relationship

existing between the industry and risk. Additionally, Safe Adventure would add the confidentiality aspect desired by a number of stakeholders. However, it would not just constitute another organisation. The industry already consists of organisations with the means to establish a committee. The ACCT, ASTM or a combined effort between the two as an extension of the two may be the answer to provide the committee with legitimacy and gain trust by the industry stakeholders. As such, the two organisations may have to merge to streamline standards and thereby the committee to gather all stakeholders. IERM provides the aerial adventure industry with a comprehensive risk management tool putting in place the required appropriate infrastructure and procedures to effectively manage risk. The CIRM Group is critical in this aspect, centralising all risk management procedures, providing the industry with knowledge on accidents and educating stakeholders. Safe Adventure offers an essential knowledge transfer tool between the committee and industry ensuring the confidentiality.

Bearing this in mind, this study introduces a framework depicting the function of the CIRM Group, below. This framework in turn provides one of the key contributions to industry knowledge of this study. Stakeholder groups 1-4, consisting of the key stakeholder groups within the industry, identified through Mitchell et al.'s (1997) theory of stakeholder identification and salience, transfer their knowledge, at an individual level, to the CIRM Group, which in turn shares this knowledge with the rest of the industry confidentially through Safe Adventure. Additionally, this study furthers the discussion on the importance of merging all industry standards to present one coherent standard for the industry, whilst also dissolving the current fragmentation existing within the industry. The merger of ASTM and ACCT to create the CIRM Group would present a big step in that direction. Finally, the conception of the CIRM Group and Safe Adventure also provides this study with two key contributions to knowledge, facilitating the improvement of risk management procedures within the aerial adventure industry.



2.

Figure 10. CIRM Group (Author, 2017)

7.1.6 – Contributions to knowledge

This study has created a number of contributions to knowledge, theoretically as well as industry-wise. The key contributions to knowledge of this study are derived from:

- The implementation of ERM in the aerial adventure industry, leading to the creation of IERM, a theoretical and industry contribution, shifting the traditional individualistic focus to the collective industry as a whole. In the literature, ERM has yet to be introduced to the aerial adventure industry, or tourism studies in general for that matter. The adventure tourism literature lacks a risk management framework, which is provided by this study through IERM. So far, the ERM literature has primarily focussed on the single organisation, rather than an industry, thus providing another key contribution to knowledge.
- The creation of the Safety Committee Life Cycle adds another theoretical contribution to knowledge. Heavily inspired by the works of Selin and Chavez (1995) and Caffyn's (2000) tourism partnership models, this model posit the never-ending need for industry-wide stakeholder collaboration and a safety committee in the aerial adventure industry, in light of the never-ending cycles of risk management and innovation faced by the industry.
- Improving industry risk management procedures through stakeholder collaboration. At this stage, the literature has yet to focus on the importance of stakeholder collaboration in improving risk management procedures and, once again, a clear gap in the knowledge exists over the benefits of stakeholder collaboration to improve risk management procedures industry-wide.
- Chapters 3, 5 and 6 were guided by two sub-theories, namely resource dependency theory and social exchange theory to understand, from a theoretical point of view, why stakeholders may seek to collaborate. Indeed, RDT and SET were briefly explored in chapter 3 and found a lack of resources and mutual dependency to be critical motivations, which was later found to be the case in the data as well. Bearing this in mind, chapter 6 argued for the combination of RDT and SET to propose the relational resource dependency framework. The relational resource dependency framework provides this study with another theoretical contribution to knowledge.

- The key industry contribution to knowledge in regards to industry can be found in the creation of the CIRM Group and Safer Adventure, a proposed safety committee for the aerial adventure industry with a sole purpose of improving risk management procedures for the industry as a whole through stakeholder collaboration. Knowledge is transferred from the group through Safer Adventure. Throughout this study it has been argued that to improve industry risk management, the stakeholders need to collaborate and pool their resources. Once again, the industry lacks knowledge and the stakeholders depend on each other to improve risk management procedures and thereby improve the long-term sustainability of the industry as well as the individual organisations.
- The creation of the CIRM Group framework also added another theoretical contribution through the development of a Collaborative Industry-wide Risk Management framework, depicting the combination of industry-stakeholder collaboration and industry-wide risk management.

7.2 – Limitations

The researcher did encounter limitations along the way. Given the number of stakeholders in the industry, the twenty interviews do not represent the complete view of the industry, but merely an insight. As a result, it could be worthwhile undertaking quantitative research in the industry as well, in an attempt to engage with even more stakeholders, particularly in regards to accident and incident information, something the industry is lacking and has been decried throughout this study. It was also noticeable that not all standard-writing organisations took part. Indeed, some of the largest organisations within the industry chose not to take part, for reasons unknown to the researcher, which has undoubtedly provided a limitation to this study. Another limitation was also found in the data gathering as questions in regards to collaboration were generally answered with a short-term mind-set. Participants seemed unable to consider how to collaborate long-term and were not pushed sufficiently by the researcher, meaning the long-term maintenance issues surrounding collaborative arrangements were not explored. Further, whilst the public stakeholder, the state agencies, is represented in the data, the tourist is not. This study did seek justification in omitting said stakeholder, due to the presence of the public stakeholder as an alternative. However, it could also be worthwhile exploring the thoughts of the customer, despite their limited knowledge of the activity and the industry in general. Finally, this

study has on numerous occasions described the importance of the staff and participant interaction and how this shapes the overall experience of the latter. It would therefore be very interesting to do further studies into this relationship and the role it plays in co-creating experiences for both staff and participants. It is undoubtedly a rather unique relationship and unlike anything in the amusement ride industry. Further, as more and more aerial adventure parks are pushing for efficiency, this co-creation is arguably losing its potency. Exploring the effects of this change would also be interesting, from an industry point of view.

7.3 – Future research

In light of the limitations presented in the previous section, this study naturally finishes with a number of ideas for future research. Considering the consumer did not take part directly in this study, research in this regard would be valuable, particularly given the insight it might provide the industry. With this study being the first to explore the aerial adventure industry, a qualitative approach to the research was, arguably, required. However, this has now opened the door to extensive quantitative research being conducted. Adventure Park Insider is in the process of conducting an industry report at the time of writing, which will undoubtedly benefit the industry. Yet, so much still remains to be learned from an academic point-of-view, that academic quantitative studies would also be interesting, particularly in regards to accidents/incidents, actual numbers on collaborative levels within the industry and more.

This study recommended a collaborative approach to risk management and, at the time of writing, that is all it is: a recommendation. It would therefore be very worthwhile to conduct a longitudinal study, perhaps using action research, on collaborative levels within the industry and particularly so if the industry was to take on-board the recommendations of this study. In that case, it would also be possible to test one of the contributions of this study: the life cycle. Indeed, with this industry being so new to academia, there are numerous of areas to research going forward and it is the intention of the author to cover as many as possible. Going forward, research into the aerial adventure industry and wellness tourism, the impact on heritage visitor attractions, the impact on regional destinations, innovation, introducing enterprise risk management to adventure tourism, the importance of co-creation to the activity and adventure tourism in general, and collaborative leadership in tourism will be explored. Finally, classifying the aerial adventure

industry appropriately would be very beneficial to the industry and its stakeholders. This study has attempted to do so, classifying it as an adventure tourism visitor attraction and not an amusement ride, yet an official classification is clearly missing. It would help remove some of the misconceptions currently existing among the industry stakeholders.

7.4 – Practical Recommendations

The practical side of this study perhaps served as the original motivator for the author. The aerial adventure industry, seemingly, has a bright future ahead and will undoubtedly be fascinating to follow over the coming years and decades. However, a number of practical recommendations have arisen from this study to ensure the long-term sustainability of the industry. The aerial adventure industry sits on a lot of knowledge, but it is hidden in pockets among the various stakeholders, which is not healthy for the industry going forward, as this has repercussions to the risk management procedures. It is the belief of this author that the industry needs to gather and collaborate on a complex issue, such as risk management. It is very much the belief of this author that the risk management issues faced by the individual stakeholder and the industry as a whole cannot be dealt with effectively on an individual basis. Therefore, IERM serves as the ideal solution. A safety committee is required for the industry, ideally headed by a combination of ACCT and ASTM and in conjunction with the various states. Whilst the industry will probably never be federally regulated, it would be beneficial if the regulations introduced by the various states were, more or less, uniform and it is therefore imperative that the industry unifies in order to work with the states in the most effective way. Thus, a combination of the standards is also required, as evidently the industry is currently split into groups as according to which standard they follow. Whilst a specific number is currently hard to come by, the industry is clearly split, with only a few stakeholders actively involved in collaborating. Whilst, a 100% commitment is arguably unattainable, more stakeholders undoubtedly need to be involved in the process.

The industry lacks critical data, despite possessing it, and the more stakeholders participating will help remedy this. As such, the facilitation of collaboration needs to improve within the industry. The ACCT's annual conference is seemingly the main gathering point, yet this is evidently not sufficient. The ACCT is already researching further avenues to improve on this aspect and it is certainly required. It is understandable that most SMEs

within the industry struggle to attend the conference in light of their economic and geographical circumstances. Yet, this is where ACCT has the opportunity to invite the stakeholders in isolation in from the cold. These stakeholders currently do not see the benefit of taking part in the conversations within the industry, due to a number of barriers such as trust, and it is up to the industry leadership to change this mind-set. As such, the industry leadership holds the key to ensure effective industry-wide collaboration becomes a reality. Education is critical. Education of private and public stakeholders. Given the origins of the industry, this would appear a complex task and will not be achieved overnight. Yet, it is seemingly critical to the long-term sustainability of the industry.

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Appendices



Appendix 1 – Interview Consent Form

Interview Consent Form

- **Title of study:** *An investigation into stakeholder collaboration for effective risk management in the US aerial adventure industry*
- **Purpose of study:** To explore how collaboration between industry stakeholders in the aerial adventure industry can lead to effective risk management.
- **Purpose of interview:** To engage key industry stakeholders in this study in order to further explore collaboration within the industry.
- **Reason for your selection to participate in this study:** Your wealth of experience and knowledge gained from working in the aerial adventure industry is invaluable to the purpose of this study. Your opinion will be held in high regard due to your experience/expertise and will assist in providing the results of this study with validity.
- **Interview process:** The interview will take approximately 1 hour. It will take place over the phone and will be recorded for the benefit of both parties (interviewer and interviewee). You will be reminded of your rights to stop and withdraw from the process at any point. Finally, once the interview has ended, a transcript will be emailed to you for your review and to avoid any misunderstandings.
- **Benefits for participating in the interview:** This is a great opportunity for the industry to attempt to shape a conversation that will undoubtedly only continue to grow over the years to come. By participating in this study, you will have the opportunity to ensure your experience is added into the findings and results of this study and, potentially, future studies.
- **Anonymity:** The identity of the participant taking part in this study will be kept confidential. Only the student, Marcus Hansen, will have the knowledge of who is taking part. Pseudonyms will be used instead.
- **Rights:** You reserve the right to withdraw at any time from this study, be it before, during or after the interview has taken place.
- **Information storage:** The information will only be used for the purpose of this study and will be stored on the researcher's personal laptop.

If you agree to these terms, please sign and date below.

Signature

Date

Interviewer: _____

Participant: _____

Appendix II – Pilot Study Interview Questions

Pilot Study Interview questions

Thank you for participating in my study. Just a reminder that this call is being recorded. A copy of the recording will be sent to you after this interview. Also, another reminder that

you do of course have the right to withdraw at any time, even after this call has taken place. OK?

The layout of the interview will go like this: starts with some general, basic questions; then some questions on risk management, some on knowledge management and finally some questions on collaboration. If you do not feel like answering a certain question, please do not hesitate to let me know. Obviously it's all confidential in regards to your identity.

OK to start?

General information

1. Please tell me about your role within the organisation?
 - a. How long have you been involved in the aerial adventure industry?
 - b. What type of operation – commercial, educational or both?
 - c. How many parks?
2. Could you please describe the current state of the aerial adventure industry?
 - a. Growth etc.
3. What do you believe is the key attraction to aerial adventure parks?
 - a. What role does risk play in the overall attraction of aerial adventure parks?
4. How has the commodification of the activity changed the industry?

Risk management

5. How would you define risk? (negative/positive/dare)
6. What type of risks does your organisation face? (customer, staff, products,)
 - a. What are they key challenges you face in managing risk of the activities?
7. What does effective risk management look like to you?
 - a. Can you describe the procedures in place at your organisation in identifying, assessing and responding to new risks?
 - b. How do you respond to an incident?
8. Does an incident at one park impact the rest of the industry?
 - a. How?

9. What role/impact does risk management have on the overall strategy of your organisation?
 - a. How does it tie in with the overall objectives of the organisation?
 - b. How does risk management relate to the overall culture within your organisation?
 - c. How important is this to your organisation, both short term and long term?
10. How does your focus on risk management balance between compliance and being a strategic approach?
11. How do you measure risk?
12. How do you monitor that risk management procedures are being followed throughout the organisation (or state)?
13. What lines of communication between management and staff exists in regards to sharing knowledge on risk management?
 - a. How do you empower/encourage staff to share information/knowledge?
 - b. How important do you consider this information/these lessons learned?
14. How do you learn from staff's knowledge?
 - a. If/how do you implement these lessons?
 - b. How would you feel about sharing this knowledge with the rest of the industry?
15. What role does leadership play in effective risk management?
16. What are the key challenge you face in managing risk?
17. Do you follow specific standards?
 - a. If so, which one, what does it involve?
 - b. Have you made any changes to suit your park better?
 - c. Can you suggest any improvements on the standards?
18. Do you agree with comments that standards should be combined?
 - a. Why?
 - b. How do they differ?
19. Can you explain how the state and other stakeholders (insurance) influences risk management procedures within the industry?
 - a. Is it voluntary to follow the state's recommendations?

Industry Collaboration

20. Is it a tight knit community within the industry?
21. Do you collaborate with other organisations within the industry (or other states)?
22. Can you describe any levels of collaboration within the industry?
 - a. Do you attend ACCT conference? Do they collaborate there?
23. What are the benefits of collaboration, in your opinion?
 - a. Are there any drawbacks?
 - b. How important is it to share knowledge/ideas with other stakeholders?
24. What do you believe is required for collaboration to work? (Trust, individual skills, right setting etc.).
 - a. Do these requirements exist currently within the industry and/or public agencies?
25. Given the majority of stakeholders are SMEs, how do you believe this may impact collaboration within the industry?
26. How do you believe other stakeholders within the industry can be motivated to participate in a collaborative arrangement?
27. On a matter such as risk management, do you see yourself and other stakeholders as competitors?
28. Do you believe there should be specific system in place to manage risk within the industry?
29. Would you consider sharing sensitive information such as risk management procedures and risk data with competitors for the benefit of the industry?
 - a. If so, how could this be most efficiently achieved?
30. Would it be beneficial to create an industry-body with the sole focus of improving risk management procedures within the industry?
 - a. If so, why? Why not?
 - b. If so, how would you like to see it implemented? (Elected group for example?)
 - c. Would you hesitate to implement recommendations from an industry-body?
31. What role does leadership play in ensuring this becomes a success?
 - a. Is a leader required?
32. Do you believe the industry working with public agencies on risk management would be beneficial?

- a. Why yes/no?
 - b. To what extent do you already collaborate with public agencies?
33. Do you believe some form of control/governance is required for this to be successful?
- a. Where do you believe control of the collaboration should lie?
(Public/private/combined?)
 - b. How could the industry-body ensure everyone adhere to the rules?
34. Would you consider it an issue that there may be a lack of industry experience on the public agency-side?
- a. Why?
35. Who do you believe should participate in a collaboration?
- a. Would a small/large collaborative arrangement be better?
36. Would a formal/informal approach be better?
- a. Do you see any benefits/drawbacks to either approach?
37. On what level do you think the collaboration should take place?
- a. Local, state, regional, federal?
38. What areas do you believe a potential collaborative arrangement should focus on?
(Operations, building, PPE or everything?)
39. Given job roles change over time, what do you believe is required for a collaborative arrangement to last long-term?
40. Do you believe collaboration with public and private stakeholders can lead to effective risk management?
- a. Why?
 - b. Can you think of any other benefits that may arise from such a collaboration?

Going forward

- 41. What does the future look like for the aerial adventure industry?
- 42. What developments or changes do you foresee regarding public stakeholder involvement?
- 43. What developments or changes do you foresee regarding risk management?

Appendix III – Interview Guide: Public Stakeholder

Interview guide

General information

44. Please tell me about your role at the government.
 - a. How long have you been involved in the aerial adventure industry?
 - b. What type of operations do you oversee – commercial, educational or both?
45. What do you believe is the key attraction to aerial adventure parks?
 - a. What role does risk play in the overall attraction of aerial adventure parks?

Risk management

1. How would you define risk? (negative/positive/dare)
2. What are the key challenges the industry faces in risk management?
 - a. How does innovation affect this? Good/bad?
 - b. What role does the human factor play in this?
3. What does effective risk management look like to you?
4. Do you follow specific standards?
 - a. If so, which one? What does it involve?
 - b. Have you made any changes to the original standards to suit the government's requirements?
5. Can you describe how the government influences risk management procedures within the industry?
 - a. Is it voluntary to follow your recommendations?
6. How do you monitor that risk management procedures are being followed throughout the country?
7. What lines of communication between management and staff at the state exist in regards to sharing knowledge on risk management?
 - a. How do you empower/encourage staff to share information/knowledge?
 - b. How important do you consider this information/these lessons learned?
8. How do you learn from staff's knowledge?
 - a. How do you implement these lessons?
9. What role does leadership play in effective risk management?
10. How may an incident at one park impact the rest of the industry?

Collaboration

11. How do you collaborate with private stakeholders within the industry?
 - a. How do you learn from industry knowledge
 - b. If/How do you implement this knowledge?
12. Do you collaborate with other states?
13. Can you describe any levels of collaboration within the industry?
 - a. Do you attend ACCT conference? Do they collaborate there?
14. What are the benefits of collaboration, in your opinion?
 - a. Are there any drawbacks?
15. What do you believe is required for collaboration to work? (Trust, individual skills, right setting etc.).
 - a. Do these requirements exist currently within the industry and/or public agencies?
16. Given the majority of stakeholders are SMEs, how do you believe this may impact collaboration within the industry?
17. How do you believe other stakeholders within the industry can be motivated to participate in a collaborative arrangement?
18. Would it be beneficial to create an industry-body, in combination with public and private stakeholders, with the sole focus of improving risk management procedures within the industry?
 - a. If so, why? Why not?
 - b. If so, how would you like to see it implemented? (Elected group for example?)
 - c. Would you consider implementing recommendations from an industry-body?
19. Would an informal approach be better?
 - a. Do you see any benefits/drawbacks to either approach?
20. Where do you believe control of the collaboration should lie?
(Public/private/combined?)
21. Some people might question the lack of industry experience on the public agency side. Do you see that as an issue?
 - a. Why?
22. What role does leadership play in ensuring this becomes a success?
23. On what level do you think the collaboration should take place?
 - a. Local, state, regional, federal?

Going forward

24. What does the future look like for the aerial adventure industry?
25. What developments or changes do you foresee regarding public stakeholder involvement?

Appendix IV – Interview Guide: Insurance Provider

Interview guide

Thank you for participating in my study. Just a reminder that this call is being recorded. A copy of the recording will be sent to you after this interview. Also, another reminder that you do of course have the right to withdraw at any time, even after this call has taken place. OK?

The layout of the interview will go like this: starts with some general, basic questions; then some questions on risk management, finally some questions on collaboration. If you do not feel like answering a certain question, please do not hesitate to let me know. Obviously it's all confidential in regards to your identity.

Any questions? OK to start?

General information

1. Please tell me about your role within the organisation?
 - a. How long have you been involved in the aerial adventure industry?
 - b. What type of operations?
 - i. Commercial, educational or both?
2. What do you believe is the key attraction to aerial adventure parks?
 - a. What role does risk/thrill play in the overall attraction of aerial adventure parks?

Risk management

3. How would you define risk? (negative/positive/dare/both)
4. What are the key challenges industry faces in risk management?
 - a. How does innovation affect this? Good/bad?
 - b. What role does the human factor play in this?
5. What types of risks do aerial adventure parks face? (Customer, staff, prod failure?)
6. What does effective risk management look like to you?
 - a. Holistic? All encompassing?
 - b. Can you describe the procedures in place you are looking for in identifying, assessing and responding to new risks?
7. What role/impact should risk management have on the overall strategy of organisations in the industry, whether operator or builder?
 - a. How does it tie in with the overall objectives of your organisation?
 - b. How does risk management relate to the overall culture within your organisation?

8. How do you monitor that your clients are following risk management procedures?
9. What lines of communication exists between you and clients in regards to sharing knowledge on risk management?
 - a. Do you share this with the rest of your clients and/or industry?
10. How do you learn from the clients' knowledge?
 - a. How do you implement these lessons?
 - b. How would you feel about sharing this knowledge with the rest of the industry?
11. What role does leadership play in effective risk management?
12. Do you follow specific standards?
13. Can you explain how the various states influences risk management procedures within the industry?
 - a. Is it voluntary to follow the state's recommendations?
14. How may an incident at one park affect the rest of the industry?

Industry Collaboration

15. Do you collaborate with the industry?
16. Can you describe any levels of collaboration within the industry?
 - a. Do you attend ACCT conference? Do they collaborate there?
17. What are the benefits of collaboration, in your opinion?
 - a. Are there any drawbacks?
 - b. How important is it to share knowledge/ideas with other stakeholders?
18. What do you believe is required for collaboration to work? (Trust, individual skills, right setting etc.).
 - a. Do these requirements exist currently within the industry and/or public agencies?
19. Given the majority of stakeholders are SMEs, how do you believe this may impact collaboration within the industry?
20. How do you believe other stakeholders within the industry can be motivated to participate in a collaborative arrangement?
21. Would it be beneficial to create an industry-body with the sole focus of improving risk management procedures within the industry?

- a. If so, why? Why not?
 - b. If so, how would you like to see it implemented? (Elected group for example?)
 - c. Would you share sensitive information with such a committee?
 - d. Would you consider implementing recommendations from an industry-body?
22. What role does leadership play in ensuring this becomes a success?
23. Do you believe the industry collaborating with public agencies on risk management would be beneficial?
- a. Why yes/no?
 - b. To what extent do you already collaborate with public agencies?
24. Do you believe some form of control/governance is required for this to be successful?
- a. Where do you believe control of the collaboration should lie?
(Public/private/combined?)
25. Would you consider it an issue that there may be a lack of industry experience on the public agency-side?
- a. Why?
26. Who do you believe should participate in a collaboration?
- a. Would a small/large collaborative arrangement be better?
27. Would a formal/informal approach be better?
- a. Do you see any benefits/drawbacks to either approach?
28. On what level do you think the collaboration should take place?
- a. Local, state, regional, federal?
29. What areas do you believe a potential collaborative arrangement should focus on?
(Operations, building, PPE or everything?)

Going Forward

1. What does the future look like for the industry? 10 years?

Appendix V – Interview Guide: Operator/Builder

Interview guide

General information

1. Please tell me about your role within the organisation?
 - a. How long have you been involved in the aerial adventure industry?
 - b. What type of operation – commercial, educational or both?

2. What do you believe is the key attraction to aerial adventure parks?
 - a. What role does risk play in the overall attraction of aerial adventure parks?

Risk management

3. How would you define risk?
4. What are the key challenges you face in risk management?
 - a. How does innovation affect this? Good/bad?
 - b. What role does the human factor play in this?
5. What types of risks do you face as an organisation?
6. What does effective risk management look like to you?
 - a. Holistic? All encompassing?
 - b. Can you describe the procedures in place at your organisation in identifying, assessing and responding to new risks?
7. What role/impact does risk management have on the overall strategy of your organisation?
 - a. How does it tie in with the overall objectives of the organisation?
 - b. How does risk management relate to the overall culture within your organisation?
8. How do you monitor that risk management procedures are being followed throughout the organisation?
9. What lines of communication between management and staff exists in regards to sharing knowledge on risk management?
 - a. How do you empower/encourage staff to share information/knowledge?
 - b. How important do you consider this information/these lessons learned?
10. How do you learn from staff's knowledge?
 - a. How do you implement these lessons?
 - b. How would you feel about sharing this knowledge with the rest of the industry?
11. What role does leadership play in effective risk management?
12. Do you follow specific standards?
13. Can you explain how the state and other stakeholders (e.g. insurance) influences risk management procedures within the industry?
 - a. Is it voluntary to follow the state's recommendations?

14. How may an incident at one park affect the rest of the industry?

Industry Collaboration

15. Do you collaborate with other organisations within the industry?

16. Can you describe any levels of collaboration within the industry?

a. Do you attend ACCT conference? Do they collaborate there?

17. What are the benefits of collaboration, in your opinion?

a. Are there any drawbacks?

b. How important is it to share knowledge/ideas with other stakeholders?

18. What do you believe is required for collaboration to work? (Trust, individual skills, right setting etc.).

a. Do these requirements exist currently within the industry and/or public agencies?

19. Given the majority of stakeholders are SMEs, how do you believe this may impact collaboration within the industry?

20. How do you believe other stakeholders within the industry can be motivated to participate in a collaborative arrangement?

a. Would regional conferences or virtual conferences be an option?

21. Would you consider sharing sensitive information such as risk management procedures and risk data with competitors for the benefit of the industry?

22. Would it be beneficial to create an industry-body with the sole focus of improving risk management procedures within the industry?

a. If so, why? Why not?

b. If so, how would you like to see it implemented?

c. Would you consider implementing recommendations from an industry-body?

23. Would a formal/informal approach be better?

a. Do you see any benefits/drawbacks to either approach?

24. What role does leadership play in ensuring this becomes a success?

25. Do you believe the industry collaborating with public agencies on risk management would be beneficial?

a. Why yes/no?

- b. To what extent do you already collaborate with public agencies?
- 26. Do you believe some form of control/governance is required for this to be successful?
 - a. Where do you believe control of the collaboration should lie?
(Public/private/combined?)
- 27. Would you consider it an issue that there may be a lack of industry experience on the public agency-side?
 - a. Why?
- 28. Who do you believe should participate in a collaboration?
 - a. Would a small/large collaborative arrangement be better?
- 29. On what level do you think the collaboration should take place?
 - a. Local, state, regional, federal?
- 30. What areas do you believe a potential collaborative arrangement should focus on?
(Operations, building, PPE or everything?)

Going Forward

- 31. What does the future look like for the aerial adventure industry?
- 32. What developments or changes do you foresee regarding public stakeholder involvement?

Appendix VI – Interview Transcripts

Participant I Conversation

O: Hello, this is [blank]

M: Hey, [blank], it's Marcus. You're alright?

[Laughter]

O: Hey, how's it going?

M: I'm all good. You're alright?

O: Yeah, I didn't know if it was you or not. It's a California number.

M: Really?

[Laughter]

O: Yeah!

M: Oh. I'm calling off Skype. Anyway, [blank], shall we do this?

O: Yeah! Yeah, sure. And, um, I'm, I'm. I have, I should be OK on service, but if you lose me you can just give me a call back.

M: Oh. Of course, yeah. No problem at all. Um, so I mean thank you again for participating in this, [blank] and especially on such short notice.

O: Sure

M: Um, I have to remind you that this call is being recorded, um, and you know like last time, I'll just send you a copy of the recording. Um, once it's all over. Um, and of course you do have the right to withdraw from this process at any time, even after this call has taken place.

O: OK.

M: OK?

O: Yep.

M: Um, the layout of the interview, um, will go like this: I'll start with some general, basic questions, um, then some questions on risk management and then some questions on collaboration. Um, if you do not feel like answering a certain questions, of course, just let me know, um, 'it's none of my business or whatever', um, and obviously it's all confidential as well.

O: Sure.

M: And you can be number [blank] again, if you want to!

[Laughter]

M: So, um anyway, are we good to start?

O: Yep.

M: Good. So, please tell me about your role within your organisation.

O: Sure, so I am the general manager of the company. Um, so I oversee, basically all aspects of the company and the operations of it. Um, and so... Um, do you want me to get into the actual company itself, Marcus, or...?

M: Yeah, if you're good with that?

O: OK. Yeah, I mean, so, um, the company that we, that we own and operate, we have three high ropes and zip line parks. Um, so there's myself as the general manager, then I have two operations managers, um and then each park has a park manager. Um, and then, um, so the three parks, um, they... they're little... each one is a little different. There's a main adventure course, as we call it and then two of our parks have a, um, a zip line course. Um, and I'll just leave the name out of the zip line course just for some confidentiality. But, um, yeah.

M: Yeah, that's cool. Um, OK. And, um, how long have you been in the industry? How long have you been involved in the industry?

O: Um, I started in 2009, so, what's that, 7 years?

M: OK, and just, again, another basic question, what type of operation, um, is it? Is it commercial or educational, um...?

O: Um, it's commercial.

M: OK. And do you offer educational activities as well?

O: Um, we do, but it's a very limited, uh, limited portion of our business. Um, it's more on a private group basis. Um, and we do a few a year, but it's certainly not our primary offer.

M: OK. Sure. And so, obviously you've been in the industry, by the sounds of it, for quite a while now, um, what's your... when you look at the industry as a whole, what's your general, um, gut feeling of the state of the industry?

O: Um, my gut feeling on what sorry?

M: On the state of the industry? You know, how, how is the industry, um, doing, I guess?

O: Sure. Um, it's growing very fast. The... since I started in 2009, you know, I kind of compare us... you know we were kind of the only game in town. And then you know these parks have started popping up, um, really all over the country, um, and you know each area that we're in... I guess we're in, you know, the [blank] and there's a lot of ski areas. Um, and all the ski areas, have kind of... taken some kind of zip line or adventure park activity and incorporated into their summer operations. Um, so, you know, with the ski mountains, and then just destination areas throughout the country you know, there's a lot of these attractions, um, and you know, I think the biggest, um... I don't know if I'd call it concern but you know the... the biggest thing I think we need to pay attention to, moving forward, is that, you know, as all these parks are popping up, and there's a fairly low barrier to entry, you know, as far as, you know... as long as you have, you know, the money to make the initial investment, there's nothing stating that you can or cannot run one of these parks. Um, so really, the, um, the state of the industry, um, it's really starting to kind of form and the ACCT is starting to, you know, discuss implementing stricter operating standards. Um, so I kind of see it as, you know, I think we're kind at a turning point. Um, you know in the next couple of years I think things are going to change, kind of dramatically, with regards to regulation.

M: Oh, OK. Um, so you think that down the road, that that's kind of the next step for the industry? Is that what you're saying, or?

O: Yeah. No, I do. Just because, you know, um, I... you know each state kind of have their own regulations and then, um, in my opinion, the real governing body is the insurance industry, um, because you know they're going to be the ones that will say, you know, yay or nay whether or not you can operate, um and basically what they're looking for is a, um, a stamp of approval from the ACCT or from the, um PRCA. Um, so you know, as, as, as these, you know, ACCT standards develop, you know that's going to impact on whether you can get, you know, insurance, um, and then, you know, each, each state and you know federal government is going to start making their own rules. So, you know, um, it's just kind of an interesting, an interesting position we're in now, to see it kind of developing. And, um, you know, everyone is kind of trying to do their own set of standards and it's not really kind of unified right now.

M: Oh, so, how... do you know how many different standards there are then, at the moment?

O: Um, well I don't know the number, but you know, I can speak for just, you know, the two states that we're in, um, you know one state is, um... they're kind of giving, handing over to the fire department, or is it the state Fire Marshall. And they're doing an inspection of our courses, um, but it's not a real inspection, you know. They're just kind of coming around and, um, you know, I kind of just compare it to, um, you know, someone who is buying a car who doesn't know anything about buying cars, and you know they just check the tires and turn the heat on and turn the radio up, but, you know, they're not really sure of what they're looking at.

M: Right.

O: And you know, it's no fault of their own, but I, I think it's kind of an overreach of the state, the state government. Um... Because, you know, they just don't have the qualifications to deal with an inspection.

M: Right. Yeah. Yeah, they don't know what they're looking at basically.

O: Mhmm

[Laughter]

M: OK. Yeah, that's kind of an issue. Yeah. Um, so, um, you went... one of the things you mentioned earlier as well was that, um, there's a lot of ski resorts opening up, um, these parks as well. So do you see that there's a lot of diversification happening as well? Um...

O: Um, did you say diversification?

M: Yeah, diversification.

O: Yeah, um, and you know it's kind of interesting, because what we're seeing is that there's not a whole lot of ski resorts that don't have one of these activities. And, you know, it's, they kind of... I don't see them putting as much, um, um, creativity, I guess, into the parks that they're putting up. They're just kind of going and getting a cookie cutter build and, you know, um, they're obviously competing with the other parks, which is fine, but I just kind of wonder, you know, down the road, is that gonna, is that gonna continue to please people, you know is it going to be enough or are they going to want to, you know, to

go to one of the parks , you know, that this is solely what they do, you know. They really put a lot of time and effort into the course design and how the property flows and, um. So, you know, one, one of the unknowns is, is that going to have an impact or do customers not ultimately care and just want to climb around...

M: Yeah, whether they want something that's convenient or do they want something that's proper... a proper attraction as such.

O: Yep.

M: Yeah, I can see that point. So, I guess, I guess that really leads up to my next question. Um, what do you think is the key attraction to, to these parks then?

O: So, um, I still think it's the uniqueness. Um, cause all things considered, it's still fairly new in the country. And it's kind of a playground, but it's a playground for truly all ages. So, you know, I think it's a unique kind of customer who has been here before, um, or you know, or has never seen it and driving by says 'oh cool lets go and do that'. And you know, it's kind of like a little kid at the playground, I mean they'll go to the same playground a million times and have just as much fun every single time. So I really think the, the attraction is, um, the heights, the thrill, the outdoor, um, activity, so you know it's something you can do outside, so it's engaging. And again, um, it goes back to that point before, you know, every park you try is going to be a little bit different and, and, um, and each one is going to have their feature and you know, thrills. So... yeah.

[Dog barking in the background]

O: Sorry Marcus, if you can hear that. My puppy...

[Laughter]

M: That's alright.

O: My puppy is at work with me!

[Laughter]

M: That's brilliant that is! That should be interesting to write down when I transcribe this interview! Um, anyway, so how important do you think, the um, I guess the sense of risk is, um, to the overall attraction of the, um, this activity?

O: Sorry, how important do I feel what is?

M: Um, the sense of risk that the customer... I guess, because there is this illusion of risk, um, with the activity, isn't there? That the customer feels... the thrills?

O: I'm sorry, I'm not getting the... the um...

M: You're not getting the question?

O: No, I'm just having a little hard time hearing you.

M: Oh OK. I'll try again, sorry.

O: That's OK.

M: So, um, how important do you think the sense of risk is to the overall attraction of the aerial adventure parks?

O: Oh, I gotcha! The sense of risk. Oh, I think it's very important. And you know it's kind of one of those things where people see that, yeah, there's obviously a danger when you get further than 5 feet off the ground. And I think that people enjoy that and, you know, you know it's like sky diving or, you know, like high speed go karting, or you know any of the other attractions you do, um, there's usually some sort of associated risk with it and I think, I think that's kind of one of the driving forces with it. You know, 'oh yeah this could be really dangerous', but they're instilling the trust in the operator that they're gonna make it safe, so it's really the, you know, the illusion of risk versus, you know an actual risk, you know, that there's a good chance that they're gonna get hurt. You know, they're hoping and trusting that the operator has really removed, you know, 99% of that risk away. But yeah, I think, I think it's very important. Because, I mean you could have these activities and say you just, you brought it right down to ground level and say it's only 3 feet off the ground, you know, I think you would have a significantly... a significantly different business and I, I don't think that would be very successful.

M: Yeah, so basically what you're saying... yeah what you're saying is that without this illusion of risk, or sense of risk, it, it, it wouldn't b... it would be a completely different type of activity.

O: Exactly.

M: OK. And so, um, so you know from having been in the industry for a number of years that, that, um, in the US particularly, when, with this industry, back in the day, it was mainly focussed on educational purposes and, um, over the, I guess since 2008 or 2007 has kind of moved towards a more commercial purpose. Would you agree with that?

O: I would, yes. Yeah, absolutely.

M: OK. Well, let's refer to that as the commodification, of, um, the industry. How do you think that commodification has changed the activity or the industry as such?

O: Um, so are you just referring to just kind of ropes courses in general and how...

M: Yeah, so how has that affected... cause obviously it places different demands on the operator and the builder, um, that is...,

O: Yep. Yeah absolutely. I think it's changing significantly. You know, obviously my opinion is gonna be a little more biased, but I think it's made the attraction way cooler. And, um, you know, the... I think you're seeing, like, so many more unique and... you know, kind of along the lines of thrill rides. You know, you're getting to see, you know, faster ziplines and steep ziplines and these challenges or bridges that are a couple of 100 feet long or couple of 100 feet high and, um, you know, these are all things that would never be possible in the traditional education... um, with just an educational component, because you're not, um, in my opinion you're not going to make as much money, so you just, um, wouldn't be able to afford any of these types of builds. Um, so you know, obviously, the educational component is still important, but I think it's a very small piece of the, um, of the actual market. And, you know, and honestly a significantly fewer number of people, or whatever, would be able to experience these activities if it wasn't for, you know, really, making these parks commercial. And, um, it's allowing anyone to come in off the street. Um, you know, if you didn't go to a summer camp or you weren't in a business that was gonna take you to a team building experience, then, um, then, then you wouldn't be able to ever, um, experience one of these courses. And so, that's one of the really great things, is that, you know, anyone can do this and the activity you're getting is, you know, so much more elaborate and so much larger.

M: Right. And so, bearing that in mind, what kind of demands, how do you think the demand has changed towards, I guess, the operator, in your case? Um, because obviously, I

don't know, were you in the industry before it was educational or has it always been commercial when you've been in it?

O: Um, for me it's always been commercial.

M: OK.

O: You know, that educational component has always been there and, um, and you know, when I was in, when I was in school, um, you know that, there was a, you know, a very small ropes course and, um, and they called it project adventure. And. And... But it was, you know, two challenges and a small rock wall, um...

[Laughter]

O: And, you know, it was cool that there was something there, but again, it goes to show you the, the completely different scale of what operations are now and, I mean, how much more that they offer.

M: Right. OK. I guess, in terms of the mind-set and the, the, um, the equipment and so on. Has that changed as well as the industry has moved on to become more commercial? Because, I guess, it's probably put, I would assume it has put a bit more pressure on the type of equipment you use for example?

O: Yeah, absolutely. And equipment has changed so much and it's, it's rapidly changing now. Um, you know, there's just so much more technology that's being brought in, um. You know, like, the traditional ropes course, there would be, um, you know, um lobster claws, which is basically the ropes with two metal carabiners. And now, you know, it's evolved to you have auto-locking, um, lanyards. So, you know, you can't detach yourself from the course once you're on there. Um, and there's continuous belay systems, so there's never a transfer. Um, so, you know, just the personal equipment that's being used, um, has dramatically changed. And I think it's really just getting started, because, again, it's one of those things that goes back to your question about me being a commercial operation, is there's money involved. And you know, and people want to spend money to make people safe, um, you know businesses want to spend money to make their customers safe... or, you know, most of them... I can't paint that completely with a broad brush, because there's still a bunch of courses who aren't making that investment in the, in the, this smart belay technology... I'm not just talking about one company. But, any of the, um, auto-locking or

continuous belay systems, they are, you know, significantly more expensive than just that traditional lobster claw, so, you know, there are, there are still a significant bunch of courses, you know, that aren't making that investment. To me it's frustrating to see, as an operator, um, because I, I see that as really a danger to the entire industry. Um, you know, and I don't want to see anyone get hurt whether it's at our parks or any other park. Um, and I know from being in this business, you know, I know how customers are and, and it's... some are great and some aren't so great. But, no, at the end of the day you need to keep all of them safe. Um, and you know, I've been hearing about accidents and I think a lot of that has to do with the operators and how much time and effort they're putting into their staff and operating equipment.

M: Right. So, um... So just... so there's some parks out there who aren't willing to invest in the... the safer products or equipment, if you like?

O: Yes, correct.

M: Alright. Um...

O: And, I, I should back that up just a little bit. Um, I, you know, I can't completely say it's because of investment. You know, they may honestly feel that what they're using, that it's just as safe, um, you know, I don't see how they could be that narrow minded, but I can't see that it's a 100% a money thing, because it may be that, you know, they don't think it's as convenient to use or, you know, they don't like to have them serviced or whatever it may be. Because there could be other factors other than just the money, but, um, you know, my gut tells me it's probably the money.

M: So how much do they cost... the auto belays?

U: Um, anywhere, um, generally, from \$4-600. Um, that's US dollars.

[Laughter]

M: Yeah, sure. I mean I guess that is a significant investment.

O: It is. And, and then you have annual service and so any of this new technology, this mechanical, you know, and that goes for breaking devices and other belay devices, um, you basically have to have them all serviced by a certified, um, service centre. You know, for

these companies. So there's a cost associated with that as well. And, um, it can be pretty significant.

M: OK. Um, and sorry, just going back to something you said earlier. It sounds like there's a lot of innovation going on in the industry going on in the industry, constantly then?

O: There is. Yes, Um, and and that really is adding to, you know, the uniqueness of the industry, so you know, if something new is coming out and the company is willing to make an investment in it, you know they can have a really unique and really awesome attraction, you know, whether it's a zipline, a freefall or some kind of a ropes course challenge.

M: Right OK. Right. So, um, we went a bit off course there...

[Laughter]

O: Yeah, sorry if I'm pulling us off to the side you can stop me!

M: No, honestly! It's all good and interesting information. So, I just... whenever you say something I just dig a little bit deeper and...

[Laughter]

O: Sure.

M: So, in regards to risk, as an operator, how would you define risk?

O: Um... well it's, um... it's kind of a very open ended. I mean there's so many different areas of risk in these operations, um, you know, I guess starting with the very, very obvious one is that, you know, it's a... you know, you're putting your customers up 60 feet in the air. Um, so there's a risk in, you know, trusting all of the equipment and trusting that, um, you know, that the customers are going to follow the rules. So, there's the safety risk of just the natural, the natural height that are involved. Um, but then, you know it also trickles down to the risk that, you know, you're dealing with your employees, and most of them are younger people, um, you know, from 18 to 25 is kind of the majority of the adventure park and zipline market staff, um, age range. Um, so you know, the risk of, you know, you're dealing with young kids basically, that you're trusting to, you know, take care of your customers. So, you know, what you put in the training them and the time you spend with them and follow up on training and the staffing. You know, there's a huge risk there. Um, because, you know, I had mentioned a little bit earlier that, you know, there's all this great

equipment, but, you know, if you do not have staff, you know, effectively communicating to your customers, you know, how to use it, how to be safe, you know, what to do up on the courses, then there's a huge risk, that, you know, that, that the safety isn't in the equipment, but the person who's running the operation.

M: So...

O: Um, and...

M: Go ahead, sorry.

O: Yeah, and, and, no, one of the... the big ones after those two is liability. So, you know, you take a significant risk, especially in the States. I can't really speak for other countries in the world, but, um, especially in the States. And, um, any time you have a customer step foot on your property, you know, you need to expect them to file some kind of lawsuit against you. Um, and you know, it may not even be a customer, it may be a spectator. So you, that's a really big risk, you know, it has a really big impact on what you can and can't do, and, um, you just kind of have to operate with the mind-set that, you know, anyone will try and sue you for anything.

[Laughter]

O: You have to really change your operation with that in mind. You know, if you have a zipline you think might be a little bit too quick, but, you know, 99% of the customers are fine with it, well you need to take a look at that 1% who isn't gonna try and stand up, who isn't going to try to walk across the bridge without falling through the gaps, um... So it's a big challenge.

M: And it sounds as though, um, it's numerous directions, I mean, with the customers, it's the staff, it's products, or equipment, that are potential risks, basically.

O: Yeah, absolutely.

M: OK. Um, how do you measure it at your, um, organisation? How do you measure the various risks?

O: Um, well, we don't put a... we don't put a value on it. I guess we really break down any area of the operation where we see a risk and we try and eliminate it. Um, and knowing you will never fully eliminate all the risk, but there is a lot that can be done to avoid it. You

know, little things like course maintenance, um, you know, if there's something that you see 'oh yeah, that could catch someone' well it needs to be addressed, um, instead of 'oh yeah it'll probably be fine for a couple more years'. Um, so kind of always, you know, taking a look at the company and the operations and every time you're thinking about it, try to have a clean slate, you know 'what is dangerous, what is dangerous to both the customers and also our employees, but also, to the, um, company'. You know, where are the areas that, you know, could really hurt, you know, the company itself and effect whether or not you can open your doors next year? Um...

M: OK. Um, and bearing that in mind, then, what would you, um, say is effective risk management to you then...? What does that look like to you?

O: Um, never being satisfied. I think that's probably the best answer I can give. You know I wouldn't sit here and say to you that we've taken care of every single risk on our property, um, because that would be lying. And you could never... you could never have your bases 100% covered. But what you could do is always be, be proactive instead of reactive and try and find anything, you know, anything that could be improved. So, you know, we... and I talk about this to our staff every year during training, you know. Every time you walk on to the property, picture it, you know, like the first time and you know, what, what poses a potential risk to yourselves and to the customers and to the business. What could we do to constantly be improving and never be satisfied that, you know, we have everything covered?

M: Right, OK. It's quite extensive then, isn't it? I mean, it's all involved then really.

O: It is, yeah.

M: Um, could you describe the procedures in place, I mean you've already gone over it a little bit, um, but, um, if you could describe the procedures in place at your organisation, um, in regards to identifying, assessing and responding to new risks.

O: Sure. So what I'll do is I'll kind of talk to you about it at a park level, um. The, so our staff for example, whenever they come in in the morning and before any customers come on the courses, we have course inspection. Um, so you know they go through every part of the course and they basically see, you know, is there a broken challenge, is there a broken board, is there a rope fraying, is there a wire that's splintered. You know they're basically looking for anything that can negatively impact the customer and their experience. Um, so

that's, that's kind of the... the discovery phase. And then there's the assessment phase and is there something that would, you know, absolutely be a [inaudible] and we can't have any customers near it, or is it something that, you know, it's on its way to becoming a problem and then they have that discussion with the parks manager and then the park manager coordinates with our operations managers on whether or not, you know, it needs to be immediately and we can't have any customers near it or whether it needs to be kind of end of the day or, you know, sometime this week. So really, you know, judging how big an impact it would have and how much of a safety factor is there.

M: OK. OK.

O: Um, and kind of the, really the step before that that I should've discussed, is having an annual inspection by a third party, so it's not always the people on the property that are a part of the business. You know, it's someone that we hire out to really go over it, you know, every inch of the course. And when I say that, I really do mean every inch, because the company that we use is really great. They literally will get up on the cables, um, and they'll run their hands over the cables and, um, on the courses, that's a life graded wire and make sure there's no issues with that cable and that, when they give their stamp of approval, that, you know this course is safe, it's an opinion that I really trust.

M: Right. So you've got, um, third party inspections as well. It's not just your own inspections. You've got someone else coming in as well.

O: That's correct.

M: OK. And, um, so if somebody was to notice something, and again you touched on this a little bit earlier, um, what's the process? Is it some... does that person try to fix it themselves? Or how do you respond to that risk basically? Potential risk.

O: Um, sure. So, um, it's always discussed with a manager. So, um, if it's just a beginning line... um safety instructor who notices something, they'll discuss it with the park manager. And if, um, the park manager doesn't feel confident, like 'oh yeah, yeah, this is something that's really easy to fix', you know, we just need to put some... put something on a frayed wire, then we can, um handle that. But if it's something that's kind of out of their wheelhouse and they're not trained for, um, then they'll kind of go up the line to the, to the operations manager. And same there, if it's something the operations manager isn't comfortable, then they'll contact me and we'll go from there. Um, sometimes we'll contact

the equipment manufacturer, the people who built the courses, to ask them, to kind of get the, the final approval.

M: Mmm. So it goes up the hierarchy, basically?

O: Yeah, it does. And, um... um, what we don't ever want to do is say 'aah yeah, I think we can make this safe and it should be fine'. And we want to be very confident that it is going to be fine. Whoever we need to talk to, we do talk to.

M: Right. Um, and so... how would you respond to an incident then?

O: Sure. That's a great question. Um, it really depends on... on the severity of the incident. Generally if someone's ever... let's just say someone is injured on the course, um, the first priority is, you know, the safety of that person and making sure we don't do any further injury to them. So, whenever it's possible we always get the customer down to the ground. So, um, get them off of the heights and get them down to the ground where it's safe and assess whether or not they need serious medical attention and then, you know, you can call an ambulance and kind of have the EMTs take over. Or if it's something minor we'll give them any first aid that they may need, and then we'll kind of, um, send them on their way. But, you know, with that there's a lot of documentation and that kind of gets to the, you know, the prevention of risk. You know, how... if someone got hurt on the course, what can we do to fix that? You know, some stuff is going to be unavoidable, you know if someone bumps into something, you know, a platform or whatever, um, you know it may just be a pure accident. But if you have that, you know, if you have customers continuously bumping into the same platform then, you know, then you need to take a look and say 'maybe it's the zipline, you know, or the challenge or, you know, maybe the cargo-net is slinging them into the platform', you know, what's going on? So, so really taking anything that may happen and, and looking... OK what was the cause of it? Was it just a slip? Or was it that, you know, we created some kind of unsafe atmosphere for them to be in and is there something we can do to fix that?

M: Um, OK. Yeah, so there's... Yeah, there's a whole procedure in place, then, in case of that. So how would you... what kind of role or impact does your risk management, um, essentially have on your... on the overall strategy of your organisation?

O: Um, I would say it probably has the most important impact. Because, if, if any of those risks that we just discussed, you know, if you have, you know, a lapse in any of those areas,

in your risk assessment and also your procedures to, to eliminate those risks... then it's really going to have an, um, a negative impact on the company. And you're not going to... it is a business and if you have you're people getting hurt at the business or if there's something negatively impacting you're not going to be able to open up your doors. So, without an effective risk management strategy you're not going to have a business.

M: Right. Yeah, that makes sense.

O: Or at least for very long!

M: And bearing that in mind, how would you say that an incident at one park, um, would, um, impact the rest of the industry?

O: Um, I think it has a significant impact. And, and, um, you know, that's kind of what I was talking about, you know, different safety systems that are being used in some companies, who aren't putting forth the investment. You know, I think it's a negative impact if somebody gets hurt on a zipline or hurt on a ropes course. You know, people see the news and... you know, that's primarily what the news is now: bad things happening. Or, someone got hurt and you know that's unfortunately how the media in the world is. Um, so, you know, if someone gets hurt on a zipline it's going to be blasted all over, you know, all different areas of the news and social media. Um, so it automatically, you know, sticks to peoples' mind. Like 'oh yeah I hurt about somebody getting hurt on a zipline' and then when it comes to, you know, summer activities, you know, mum or dad thinks about going ziplining and go like 'oh remember that person who died on a zipline' or 'who broke their leg'... you know, 'maybe we should do something different'. Um, and, you know, any industry... any injury in the industry is bad for business as a whole.

M: Yeah. Um, I guess it goes... it's a bit similar to, I don't know if you heard, but we have a major, um, theme park over here in the UK that had a major incident, um, last summer. Um, you probably didn't hear about it in the US, but I mean it was a theme park, not an aerial adventure park, but, um, I think it was like six people that got, um, one person lost a leg for example. It was awful

O: Oh jeez! That is awful.

M: But their sales dropped by 15% I think. Um, and it's basically the biggest theme park in Europe. So, yeah. Yeah, I see what you mean.

O: Yep, it's scary. Yep.

M: Um, given the size of your organisation, you said you have three parks, how do you monitor that the risk management procedures are being followed throughout your organisation?

O: Um, yeah, that's a good question. Um, we've gone... Um, we've gone pretty... exclusively digitally, um. So, that's really helped. Having multiple parks it really helps me see that all of these things that we've been talking about. Like course inspections, for example, um, you know, the employees will go in and they will put all their course inspection data into a spreadsheet that I can see online. So you know, at any point in the day I can see that OK yeah they're doing all these measures that we've put in place to keep our customers in place. And then we have a schedule for our operations managers to do an inspection and also myself to do an inspection, um... So we kind of look at what areas pose the most significant risks, because we obviously bump up our monitoring of those things, you know, whether it's a weekly or bi-weekly inspection of, you know, certain devices or certain equipment, you know, we'll do that, um, kind of on an upper management level. So making, you know, making sure that, you know, we don't just put a procedure in place, but we put in procedures to, um, to double-check all of the procedures we're giving to our staff members. Um, so our operations managers, or myself, every Tuesday afternoon we're gonna go back through all the inspections reports and discuss any issues with the park managers. Um, and, you know, that's just an example, but, um, we're really putting procedures in place to make sure that we are, you know, mitigating all the risks possible.

M: Wow. And so you said you've actually gone digital? So you can actually... so you can actually, you can see from your headquarters, or whatever, what's been done at the various parks then?

O: Yeah, exactly.

M: Oh wow. Brilliant. Brilliant. That's clever. Um, that's a really good system. Um, you said earlier...

O: Yeah, it's... it's

M: Sorry, go ahead [blank].

O: Yeah, it goes back to the, um, overall purpose of this conversation that we're having, which is risk management. You know, that's one area that we looked at and said, you know, we have all these paper documents, um, and, you know, you have some staff who looks like they're in second grade when it comes to their hand-writing and you can't read a thing...!

[Laughter]

O: And you wouldn't even be able to tell who's signed off on it. Um, and then there's also the, you know, if a customer calls us up, you know, and say 'hey three weeks ago I was at your park and there wasn't a pad on the pole when I bumped into it'. Well then you can say 'well, let me, let me look for two seconds while I'm on the phone with you', you know. Was an inspection done that day? Was the [inaudible] in place? Was the bridge missing? You know, was there an issue on that zipline? Um, so, you know, it's all digital so it's very easy to go back and reference. You know, there's not the issue of 'oh shoot am I going to be able to go back and find this paper' and 'am I going to be able to read it, if I do find it?'

M: Right. OK. Yeah, so it's just streamlined basically. So much more efficient. Um, and, um. Right, and earlier, [blank], you referred to, um, you follow some certain standards... I think you said ACCT?

O: Um, yeah. Those are the standards that we're following.

M: Right. Um, would you mind just walking me through what those standards kind of involve? Just basic outlook, basically.

O: Sure. So there's kind of a... a couple of different areas of the standards. One, um, is the actual courses themselves. I mean, how the courses are built, you know. Are they built, you know, using all of the current industry standards. And a lot of that is just honestly just the manufacturer's standards. So if the manufacturer says you need, um, four clamps on this, um, the ACCT will adopt that into their own standards. And when you're having your course inspection done, you know, they'll say 'yeah they have the right number of clamps on that cable'. You know, the poles are the correct depth in the grass, um, they have the correct number of guide wires. So, there's the course construction standard. And then, kind of the other aspect of it is the operations standards. And, and they're really starting to, um, significantly develop those. Um, kind of the past six months they've been working on some new operating standards. I mean, it's fairly basic to what they have right now, um, but you

know, operating standards, you know, such as, you know, ziplines, you know, if it's over 6 miles an hour, you have to introduce a braking system and then they discuss some different braking systems. You know, on the courses, what the customers are clipping on to, you know, um, the different heights based on the different lanyards being used. So, you know, number of staff on, on the courses, you know, um, supervising. Um, so yeah, there's the constructions standards and then there's the operating standards.

M: Sure. But obviously, um, like you said earlier, each of your sites are slightly different. Um, so do you find that you have to slightly alter them to suit your, um, specific parks better, um, as such or is it very much, um, a cookie, a cookie cutter approach, um...? Can you just go with it?

O: Um, now, you mean do we need to alter the standards to fit the park?

M: I guess so.

O: Is that what you mean?

M: Yes.

O: Yep? Not really. Um, I mean, we push back on some of them, because like I said, the, um, you know, the insurance industry is really, in my opinion, the governing body of the industry. Um, because they're ultimately saying "yeah, you can operate" or you can't, because you need your liability insurance. Um, so the insurance, the insurance industry has adopted, um, most of the standards and then they've kind of put their own twist on it. Um, so generally whatever I do... you know if there's something I don't agree or it's not going to work at a park, you know, I make, I make a conversation about it with, you know, whether it's the insurance company or the ACCT or an inspector and say hey, you know, this is what's going on and this is why I think it should be different. Um, and, basically, to make sure customers are safe and also to cover our own... um... to make sure there's other people who agree with you, so, you know, whoever made that standard, do they understand and do they give you the OK that yeah you can certainly modify it to fit within your operation and still accomplish the goal.

M: OK. So with that in mind, can you suggest any improvements as such? I mean, I know you said that they're obviously bringing out improvements already anyway to the standards, but is there anything in particular that you thought that they might do better?

O: I really like the idea of having a qualified third party do your inspections. And I guess one area that I see right now that, um, concerns me a little bit... You know, not everyone has to do that. So for example, some builders, um, that constructs their parks, you know, they might do their own inspections. And you know, I don't like saying that you have to, um, have someone else do it, but at the same time, you know, if... you're obviously going to be a little bit biased if you're doing your own inspections and, and you may cut corners in areas... you know, if... you may not be completely ethical about it and say 'oh you know I can probably pass this one', you know, just because it may save you \$1000. You know, whereas when you have a third party come in they're not going to make that exception. You know, they're going to tell you that you either have to replace it now or, you know, or you need to replace it next year. I mean, I honestly think that's the safest thing, to have that non-biased opinion to say 'hey I'm not at the park every day, I'm not on the payroll. You're paying me to, to say yes this is safe for your customers'. You know, having that opinion is really something I think everyone should have. Um, because again, you know, if people are coming to this park and trusting that, you know, everything is safe and you have this one operator who's not ethic... ethically... you know, or holding himself to a higher standard, then, you know, that's when accidents happen.

M: Sure. I mean, like you say, it's always better to have a different set of eyes to look at, um, the work.

O: Yeah, exactly.

M: Um, and in your case, does the state influence your risk management at all? Um...?

O: Um... not really in a positive way, to be honest. You know, they... I... I had mentioned that, um, there was a fire marshal's office and kind of the reasoning behind that is that these guys go and inspect amusement rides. So what they've done is, is put ziplines and adventure courses or adventure parks into the amusement category...

[Bad signal]

M: Sorry, [blank], are you there?

O: Hello, can you hear me, Marcus?

M: I can now, yeah.

[Laughter]

O: You got me? Where did you lose me?

M: You still there?

O: Yeah, I'm here.

M: OK. Sorry!

[Laughter]

O: Where did you lose me?

M: Where did I lose you? Um, we were just talking about, um, the fire marshal and how they...

O: OK. Yeah so basically they popped us into that category with other amusement rides, so rollercoasters, Paris wheels or whatever. So, the state has us pay for these inspections that are, you know, pretty expensive and, um, you know, in my opinion, pretty unnecessary if you have a, a third party vendor doing those inspections for you. Um, so, you know, I think that's just a pretty basic example, but, it's kind of the state putting their hands into the business where I don't see that they're qualified to do so. So...

M: No, no. I mean, um, that's an interesting point you make there about the lack of experience in the industry. So this fire marshal, he's not an... I guess an educated... um... inspector, then, as such?

O: No. No, they're really not. I mean and what... what they're looking for, you know, they're calling it a course inspection, but really what they've come to look for, you know: are there any obvious hazards. Um, and, you know, and I can understand that, but to pay \$100 for someone to come in and tell you that and forcing you to, to use that service... I don't think it's right. You know, I mean, if there is a hazard there, you know if you have some kind of inspection being done already by a third party then those sort of details are already covered. So, I, I think there should be at least the opportunity to opt out of these type of things when you're already doing it, um, you're having it done by a qualified party.

M: OK. OK. Um, moving on to collaboration. Um, would you describe... the industry... is there a tight knit community in the industry?

O: Um... Yes and no. Um, there's definitely a tight group of people who have been in the industry for a long time, um, and that can sometimes... if you're an outsider or someone just starting a business, I can see it being difficult to, um, to be allowed into that organisation. Um, but again it kind of goes back to the... you know as the industry is maturing and there's so many technologies out and it's really, you know, it's really a large, um, um, business to have, you know, a park or to offer services or equipment to parks. Um, you know, and most people are, um, are very open to talking to you. Even if you're a brand new potential customer, because it's going to mean money for them in the long run.

M: Right. And so, in your case, does your organisation, um, collaborate with other organisations within the industry as well?

O: Um, yeah we do. Um, we try to establish relationships, um, you know, with different vendors and, um, just different operators. Um, and, you know, I think it's fun being able to talk to other people, um, you know, about what they're doing and, um, you can always learn from someone else. Even if you've got 25 years experience, you know, at the end of the day there could be someone who has one year of experience who has put this fresh perspective on it who'll have really great ideas. Um, so I think when, you know, you discuss the tight knit community, I see some people who've been in the industry for so long, um, really resist the new things and changes... Um, so I can see a potential conflict there. Um, but I think for the most part, people are pretty open to discuss certain things.

M: So what kind of levels do you think, um... what kind of levels of collaboration already exist within the industry then? Because, I know, obviously the ACCT, they have an annual conference for example. Do you attend that?

O: Um, I usually do. I did not this year, but I try to go every other year. Um, and it's, it's a really good opportunity to just feel the kind of... meet people face to face and, um, you know, you're probably... if you're in the industry, you're probably going to be dealing with, um, with, you know, um, a majority of the vendors, whether you're calling them to get pricing or you got questions or there's, there's new technology out that you want to explore. So you're always talking to, um, to people on the phone or via email all over the country, or all over the world really. So ACCT is really the one big conference where you have the opportunity to go and meet people face to face and really kind of solidify the relationship that, you know, you started.

M: OK. Um, so that sounds like... sounds like that's kind of the, um, the main gathering point, if you like, within the industry...

O: Yeah.

M: Yeah. OK. Um, what, what would you say are the benefits of collaboration then?

O: Um, really education. Um, so you know, I think, you know, the more people you talk to and you understand kind of what they're doing and you go to try their parks. Um, you know, it really educates you on, you know, how to make your operation better and... and not, not to, um... not in a way to steal their ideas so you can, um, make more money. But really just to, you know, see things that different parks are doing to keep their customers safe. Um, so you know, you see different ways that, um... you know, that, um... companies will harness their customers and then, you know, keep the harnesses dry, you know, and out of the dirt, you know. Um, just... you know, walking paths or lighted walking paths. There's just so many... as, as all these courses are growing there's so many different ideas and so many creative minds that, you know, it's really good to see. You know, 'oh yeah, I never thought of that, but that's a great way...'. So, you know, give my customers a place to put their wallets and cell phones. So even just a basic example. But really, the more people you talk to and the more courses you see, you know, it makes you, um... it gives you the opportunity to really decide, you know, how to most effectively and, and safely run your business.

M: So, basically... um it sounds as though collaboration is already an essential part for risk management in the industry then?

O: Yes. Oh absolutely!

M: OK. Um...

O: I like how you came full circle there!

M: Sorry?

[Laughter]

O: I said, I like how you came full circle there.

[Laughter]

M: Yeah, I know. It's good to just get you on record saying that...

[Laughter]

M: Um, no. Um, so what do you think is, um, is required for collaboration to work? I guess on an individual aspect and on, um, on the industry as a whole.

O: Um, yeah, I mean I would say that the individual, you know, just being open and having an open mind. I do talk to people that, um, you know, they are just so stuck in their ways and honestly just kind of arrogant, you know, about what's going on and about what they're doing. You know, one that they have the opinion that, you know, they'll never share anything with you and what they're doing is the absolute best and, um, when in reality all you have to do is just pay fifty bucks so you can go to their park and see exactly what they're doing really! And nothing is safer there when you have a business that's open, um, to the public, um... but so, you know, I just kind of see that stubbornness and arrogance of some people that, you know, it really is a detriment to the industry. But, with that said, I mean there's so many different players and so many different operators, you know, in the industry now, that you know, one or two being, um, that are, you know, just kind of being pig headed aren't gonna, aren't gonna, you know, negatively affect the entire industry as a whole.

M: How do you think then that these, um, well I guess, the people you are referring that are maybe not as open-minded, um, and other people that aren't perhaps as collaborative for whatever reason, how, how do you think that they could be motivated to, to participate more?

O: Um... you know that's a good question and I'm honestly not sure what the answer is. You know, I think, you know, as with any business and not just in this industry, you know there's always going to be people, um, you know, don't want to be, you know, friendly or open or sharing of ideas, um... and I think that's just people in general, you know, I, I don't think you're ever going to be able to force people to be open and collaborate... You know, I think, um, maybe the only thing that may change them at some point is, um, that, that they see other people, you know, collaborating. So, you know, they, they may see other people at the ACCT and, you know, establishing really great, you know, relationships, warm relationships, maybe just friendships in general, and, um, maybe, maybe they'll eventually feel like they're kind of missing out and wanting to get on-board with that.

M: Right. Yes. Yes. Because, it sounds as though... and you said that before as well, that some people maybe they are just starting out and so on, might be left out a little bit, just because they're not in the trusted circle or whatever you want to call it.

O: Right, yeah.

M: Right, so, um, would you consider then... because, you said a little bit earlier... would you consider, um, sharing sensitive, um, information, such as risk management procedures, um, with competitors for the benefit of the industry?

O: Um, yeah, I would. I mean, just again, it kind of goes back to, you know, I don't want to see anyone ever getting hurt, so if there's something I can do to kind of mitigating that risk for another company, then I definitely will, because, you know, you're obviously a competitor, but I think that, you know, that stops, you know, at the business level. So whether it's your marketing videos or your location, you know, I, I think, you know, it stops there and, you know, just for the safety of the people in general. You know, I don't think there's any excuse anyone should have for not keeping people safe.

M: OK. Right, so, in terms of risk management it's just about, um, having an open mind and being open, um, to suggestions and so on from other...

O: Absolutely.

M: Yeah. Do you believe, then, that the industry, um, could work with public stakeholders... or agencies, um, um, in terms of... on risk management? Do you think that could work?

O: Um, I do think it could work. Um, I just think it has to be, um, very kind of carefully executed, because of, you know, when you give the government any kind of power, it's very hard to get that power back, if ever. Um, and, and, and you just want to make sure the ultimate goals are still being accomplished. You know, I've talked about the fire marshal and the organisation. You know, and the ultimate goal is to, to keep people safe, but if they're not actually doing that, then all it is, is just turning into 'here, I'm going to write you a check' and you're going to say 'ok, yeah, great'. Well, where... there's going to be no accountability there at the end of the day, because they didn't know what they're looking at. So, you know, I'm supportive of there being some kind of, um, public or some kind of government regulations, um, but, you know, I, I think it should be on a very base level. So, you know, maybe, you know, 'hey what we're going to require these companies or these

operators to have an inspection now', you know, versus, you know, 'hey, we're going to do the inspection'. Because, um, and everyone has their own opinion on this, but generally when the government gets their hands on something, they screw it up.

[Laughter]

M: Yeah.

O: Um, so, you know, I think it should be left to the private market, um, to, to have those inspections done, um, or whatever it may be you're discussing, um, so you know, if the government wants something done that's one thing, but if they want to do it themselves, you know, I think that's a completely different thing.

M: Right, um. So if they had a... if they were, perhaps, the capacity to enforce, um, the, um, the rules, I guess, um, that would be one way of doing it, but as long as they're not overreaching basically?

O: Exactly. And, um, and I don't think there should be a monetary value on something. You know, I don't think you should pay to be certified by the government. I think you should pay a private party to certify you.

M: Right. Yeah. Um, so, and I think you've probably already, kind of answered this question then, but where do you believe the control of a collaboration should lie then, um, if you're collaborating, I guess, with public stakeholders as well? Where should the ultimate control lie?

O: Um, well that's a good question. I mean I honestly think the answer is it circles back to the insurance industry, um. You know, the... they're going to be the ultimate ones that say, you know, 'you're going to have to have this or you can't operate'. Um, and, you know, that could be a little scary, but at the same point, um, it's a private market and, um, it's competitive. Um, but, you know, I, I think that you're going to get the, the most realistic, um, standard, um... or, you know, or... guidelines that needs to be followed, you know, from then. Um, but you know, it's kind of a tough question, because, um, I'm not sure who should ultimately say, you know 'hey they public's going to do this, the private sector's going to do this'. Um, you know, I... I honestly think... it's not going to be... I don't think they're going to collaborate like this anytime soon. Um, you know, I... and especially just because there's so many, you know, different states, um, and even different cities that are

gonna want to put their own, you know, their own guidelines in. And it kind of goes back to, you know, the willingness to talk with other people and... um, the open-mindedness. Because, you know, you may have one city councillor that thinks that, you know, what is the ACCT, for example, doing and then they're gonna want to put their own standard on it. Um, and you know, I, I just think it's such a... it's a very large country and, you know, each state has so many different bodies of government, you know,... it's tough when you... when you get the, the government involved.

M: Mhmm. Do you think that a combined approach could work? Um, you know where it's the industry working with the government? Um...

O: Yeah. Yeah. And that's the ideal situation. It's that, you know, members of the ACCT and the PRCA, um, and then, you know, there's the big insurance company that's been around covering all these parks that know, you know, where people are getting hurt and why they're getting hurt. Um, you know, they get together with, you know, the state officials and they, they develop standards. You know, based on all of that wealth of knowledge, knowledge versus, you know, one organisation saying, you know 'I'm more experienced' or 'I know more'... Um, because that... it's just not going to end up working that way. Yeah, it is exactly, you know... the best way to do it is to get everyone involved, and the operators involved as well, um, you know, it's just... it's tough doing that.

M: Sure. Yeah. Um, but in an ideal world...

[Laughter]

O: Yeah, exactly!

M: Um, yeah, I guess that's what I'm trying to get at, is... um, whether as an operator, you think, um, that with all the experience and knowledge the industry has, at the moment, in a lot of states, it's not being enforced, and, um, if that was the sole purpose of the... public agency to be involved in the collaboration is to basically give it legitimacy, that it could then work.

O: Yes. Yes. And, I mean... exactly. The ultimate goal, the high level goal, I mean, that we should always be focussed on, you know, why is anyone getting involved in the first place? It's the risk management, you know. So, why... you know, keeping that in mind, then you need to say, 'well OK, this official is going to be doing this job' and, you know, ultimately is

he helping, um, you know, really deter any risk? Or is he just, you know, um, you know, jumping on board, because that's what his boss told him to do. Um... You know, as long as the actual inspections are being done, or you know, steps are being taken to keep people safe, then absolutely, you know, you move on with it. But, you know, sometimes that high-level goal is, um, is kind of lost when you get too many people involved.

M: Yeah. Yeah, because that kind of leads to my next question, um... Do you think it's more difficult if you have a large collaboration, um, or do you think it would be, um more effective if it was kind of like, I guess, a smaller collaboration, but still, obviously, representing the industry? Um... bit with not hundreds and hundreds of voices?

O: Um, yeah, you know, I think ultimately it has to be a fairly small group of people that, that, um, take part. And I guess, you know, you could look at what the insurance industry has done and go and they'll say, you know, 'hey, this is what we're requiring for you to operate and it's an inspection done' or it's you're weighing customers, or checking IDs or, you know, um, making sure you don't have holes in your parking lot. So, you know, maybe it's just a set of standards that the public sector puts out and it says 'hey in order to operate a park in our state, these are the things you have to do...'. You know, having an inspection done, make sure you know, you're not creating an unsafe environment and then, you know, those are the things your inspector will look for. Um... And, you know, I think that's the most ideal way... and then, you know, that kind of puts it back on the operator to say, you know, it's very obvious, very clear, you know, what I need to do to kind of meet the requirements of the state, and meet the requirements of my insurance company and then also keep my customers safe.

M: Right, OK.

O: So, yeah. I guess, going back to your question, I think... I think if it's kind of a small, if it's a smaller group of people that kind of get together and say this is what we're doing and, you know, this is... to hear some standards and then put it out to a vote... you know to all the operators, you know, the builders and, you know, everyone who's involved, and say, um, 'here's what we came up with, what do you guys think?'. Um, because, if you get too many guys in one room, you're never going to be able to create anything.

M: Right, exactly yeah. So basically, it would be more... um, it would be easier for the industry to accept if it was something to developed by the industry with the government, rather than the government going in saying 'this is the rules'.

O: Exactly.

M: Yeah, OK. Um, so, on what level do you think the collaboration... or a collaboration would be best to take place? Um, would you think it would be more efficient on a local, state, regional or federal level? Because you said it was a big country...

O: Um, I would say definitely not the federal level.

[Laughter]

M: OK.

O: Um, I think it should be done at the state level. And you know, you could have representatives from each state, um... but, ultimately I think it should be done at the state level, because, um, you know, things are different in every state. Um, you know it's such a big country that you really can't paint with a complete, you know, one swipe of a brush, because, you know, everything is a little bit different and everything is unique and has its own circumstances. Um, so, but yeah, I think that the state government should be the one involved and not the federal government and not the local, the local town, because, again that kind of goes back to, you know, how much focus is going to be put on, you know, this whole process. And, you know, I think at the state level, you know, the resources are there to put that focus in.

M: OK. Yep. Um, and... if this was to take place, what... what areas do you believe this collaborative arrangement should focus on? Um, do you think it should be everything, like the ACCT; operations, buildings, PPE? Um, or do you think it should be more specific?

O: Um, you know I think, because the ACCT has... or the PRCA, and I don't want to speak for one organisation over the other, but I think the ACCT... um, you know, they've done a pretty good job and spent a lot of time and resources in getting their standards created. So, you know, I, I think it's kind of counterproductive to have someone else come in and create a new set of standards. You know, I mean, if they find something that they say, you know, 'I don't really like this from the ACCT lets go and talk about it and maybe we can amend it'. Um, you know, I think that's one way to do it. But I don't think... I think it's just kind of a waste of time and resources and also, you're not using the knowledge that's already been there by using, you know, by using standards that have already been developed.

M: Sure. Yep. Yeah, that's brilliant, brilliant, brilliant. Right, just a couple more questions, [blank]!

[Laughter]

O: OK.

M: Um, so, um, just going forward, what do you think the future looks like for the industry?

O: Um... well, I... it's hard to predict, um, but I think, um, pretty much everything we've been talking about. I think there's going to be some form of, um, you know... government regulation taking place, um, but I honestly... I'm not sure how it's going to play out. Um, but you know, I see that it's going to continue to grow. Um... you know, I think that some of the... some of the smaller parks, um, that, you know, aren't really focussing on, you know, putting the investment in that keeps, you know, keep their customers safe. I think they're gonna start kind of fizzle out. But... um... my hope is that, you know... there will be some form of measurement to say, you know, is... is every company doing the due diligence to keep the customers safe. Um, and, I, I think, you know, the majority of the parks and business are doing that. Um, but I think it'll continue to grow in a healthy way, um, especially once we get kind of this, you know, this conversation about regulation and standards, kind of, you know, put in the rear-view mirror. And, I mean, you'll always be amending and changing things, but there's just so much uncertainty now that, you know, it kind of impacts us a little bit.

M: OK. So you feel there's quite... there's a little bit uncertainty at the moment, then? About what's going to happen eventually and so on?

O: Um, yeah! And I'll give you an example. Um, you know, we have a, we have a lot of ziplines at our parks. Um, and... you know, some of those ziplines have, um, a braking system on them. Um, but other ziplines are shorter, um, not as fast. It's all gravity braking. So that basically means that, you know, as the customer approaches the platform they slow down and, you know, a lot of customers going in naked all the way to the platform. So one of the... one of the uncertainties that I have is... um, you know, is a standard going to be put forward saying that 'every zipline, no matter what, has to have, you know, a mechanical or some type of a braking system, um, other than gravity braking'. Um, so you, you can imagine every zipline, you know, in the country that doesn't have some sort of, you know, braking system, is gonna be 'OK, now how do I implement on my entire park?'. And maybe

it's expensive to do for a lot of companies. Um, and you know, so that's kind one of those standards that I'm talking about, or one of those, um, you know, organisations, you know, getting together and say 'oh yeah everyone should have a brake, that's obvious!' without really understanding, you know, how the ziplines work and how parks have, you know, been operating for years without a mechanical braking system. Um... So that's kind of an example. But any type of regulation could have, you know, a very large impact on how... how does this operate? Or if it's able to operate anymore.

M: Yeah, I mean it sounds as though one of the things you're concerned about is the resulting costs of, um, any new regulations or standards being introduced. Um...

O: Right, yeah. So yeah. If you have a park, you know, that was built to one standard... and then, you know, the standards are changed, is it going to be possible to change, you know, how you operate and how your park's working.

M: Mhmm. Well, how different are the PRCA and ACCT standards? Are they miles different or are they kind of along the same lines?

O: Well, to be honest, I can't really say for the PRCA, um, because I haven't read through them all. Um, and I couldn't tell you what the major differences are. But, um, my kind of my gut is that... you know, the ACCT will at some point in the near future be recognised as the... kind of the one body. Because I haven't seen the PRCA get very much traction. Um...

M: OK. Yeah.

O: And that maybe, I don't know if they're over in Europe? Maybe it's different over there?

M: Um, well we have, um... Our lovely EU, of course, wants to control everything.

[Laughter]

O: Yep, right.

M: Um... So, we have some standards that was, that were, um, developed by, um, a European ropes course association. Um, and they're kind of being enforced Europe-wide, although it is slightly different. But, yeah, I mean, we don't have PRCA and the ACCT over here, um, but, just from the research I've done, it sounds as though all of them are actually collaborate with each other. So yeah, that kind of answers my question. Um, [blank], that is

all I have! And I'm sorry to have kept you for a little bit longer than I said! Thank you very, very, very much again. Um this has been...

O: Yeah, you're welcome. And if you have any follow-up questions or if I didn't quite get one, you can always call back.

M: Oh, thank you very much. I appreciate that. And like I said, I will send you a copy of the recording, um, and yeah, thank you for your time.

O: Sounds good. Good luck!

M: Yeah. Take care of yourself. Thank you very much.

O: Alright. Bye.

M: Bye-bye.

Call ended

Participant 2 Conversation

R: Participant M: Me

R: Hello this is [blank]

M: Hey [blank], it's Marcus Hansen.

R: Hey Marcus how are you doing?

M: I'm good how are you?

R: I'm fine thanks

M: Oh good. Have you got a few minutes?

R: Yes I have.

M: Excellent! Thank you thank you very much for once again for participating in my study.

R: Not a problem, glad to help.

M: That's brilliant. I just have just a couple checks here. Just a reminder that the call is being recorded and then I will send a copy of the recording to you after the conversation has taken place

R: Very good.

M: And also you do of course have the right to withdraw from the process at any time even after the call has taken place. Ok?

R: Ok.

M: Um so the layout of the interview is um we're going to start with some general basic question then we're going to move on to some questions on risk management and then some questions on collaboration. Um, if there are some questions you do not feel like

answering for whatever reason please do not hesitate to let me know.

R: Ok.

M: Ok so good to start?

R: Sure.

M: Good. Good. So, yeah please tell me about your role at the State.

R: Well let's see. The state of [blank] regulates, um, amusement rides, there's a law passed and a set of administrative rules. If a device meets the definition then it is inspected by the state and registered and we require that certain amount of insurance coverage be provided and we require that any incident that results in injury be reported so with that in place we hope, um, to minimise, um, to the extent possible, risks are that could be existing in the industry. Um, and of course we adopted standard, the ASTM amusement ride standard that we used to, um, assess, um, when we do our inspections, that's how we assess the rides. Against that standard.

M: Oh, OK, so, um, so you are, um... Do you assess the aerial adventure parks now as well or...?

R: Um, we do not. Yet. We still have rules in the works in the process. It hasn't been finalised. and for those adventure parks we plan to, um, adopt the acct standard for challenge courses, um, but I am pretty sure... well we're hoping to leave the language a little bit broad so that if there is a significantly, um, a substantial equivalent standard, um, that, that was used to build a place or that was used... if it is significantly the same, then we would allow that too. But like I said, those rules are not finalised, so I don't know how that's gonna work out. It's up to us to choose a standard, and use it so that, um, so that the challenge courses would then be built and operated and maintained to certain rules.

M: Oh OK, so just, in terms of your general job, how long have you been doing that for?

R: I started, um, inspecting rides. It's a job we have here at the state. We also regulate all the ski lifts. So roughly 600 amusement rides in a year and a 170 or so ski lifts... I started working part time in, now, 2001 I think and then went on full time in 2006.

M: Wow OK. Um and in terms of the aerial adventure industry, um, obviously you're working on bringing some type of regulation in, um, but prior to that coming in to place, do you already work with the industry in some capacity? Um, communicate or...

R: Could. Could you repeat the question, please? I...

M: Oh sure, yeah of course. So, um, do you work with the aerial adventure industry in any capacity currently? Um, or are you waiting until you have regulations in place?

R: Um, I don't have any... We're not working with anybody formally, um, we do have... we do regulate some devices that, um, that overlap into that industry and we have several climbing walls that we do and many of the ski resorts now have canopy tours and aerial adventure programs... going on and of course we're... we're already regulating them. So, we have a relationship with many of the people who are doing it, um, and we do talk about it and I try to get some feedback from those folks as we try and generate, um, regulation that makes sense to see how they think about it. But we don't really do anything officially. So...

M: Right. OK. And so, I guess, from working with, um, with or talking to the ski resorts and so on... um in terms of the aerial adventure industry, um, what do you, what do you gather is the current state of the industry? Um, is growing?

R: Um... I... It's hard to say. It's certainly was... grew fairly rapidly it seemed to me... And I guess... My observations on this would be probably best described as not really a part of my official duty, but I can certainly tell you what I see. I think it's plateaued, the industry. I think it's fairly, you know, I don't know that it's turned a corner and that its numbers are dropping and I guess wouldn't have any way of knowing...

M: Sure

R: What the numbers are, but it seems like a pretty steady thing.

M: And, um, what do you think is the key attraction, um, to the, um, to this activity? Why do people keep coming back?

R: Oh, well, you know, I guess... Officially, I guess, I wouldn't have an opinion...

(Laughter)

R: It just seems, you know, it's a... It's pretty similar to some of the attractions that we've mentioned. The reason they are attractive, I think, and that is that on the surface you would look and say 'wow that looks like it's dangerous, let's try that'.

(Laughter)

R: But the whole object is to create the illusion that... that you're putting somebody in harm's way, when you're really not.

M: Right

R: Um, I guess that would probably be the best answer that I could generate.

M: Um, how important do you think that illusion of risk, or danger, is to the overall activity then?

R: Uuh, well, you know... We're kinda stepping outside of what I do, but um, I think it's probably pretty important, um, to keep people interested I guess. Or they're always, probably, they're always looking for new features and new designs that will keep it interesting, but I think it's probably pretty important because of the... you know the whole nature of this is to be up in the air and doing things that would be new to many people.

M: OK yeah. Yeah, that's what I was trying to gather... just how... whether that is actually important, to have that illusion of risk... Um...

R: Well, you should talk to the folks from the places that have them... You know they're the ones that study the demographics... You know I'm just shooting from the hip here!

(Laughter)

M: No, no, that's alright. Um, so, as an inspector, how would you define risk?

R: How do I define risk? Oh boy. Um, well, there's probably a definition somewhere. I could probably open a dictionary, but, um, it would be... in general terms... um... a level... it would be a measurable level of, um, exposure to harm, I guess.

M: Yeah, I mean it doesn't have to be an academic terms or anything!

(Laughter)

R: Right, and I'm not at the office. I'm out in the field, so I'm... I don't have, you know, a lot of leaves to draw from here.

M: Sure

R: But, no, I think... You know in the tramway business, it's all the same thing. We know that there are risks that are inherent in anything, you know. And so, that's the easy part. Once we know what they are, then we can manage them. And you know, that's a big part of what we do – is managing the known risks. But, we also keep, you know, the difficult part is saying, you know, 'what I'm looking at... it looks like there could be a risk there and it's '... and that's the difficult part, is to try to convince somebody that you think there might be a risk even though it hasn't been identified officially or... and they gotta spend money to remedy that and they've never been convinced that there is a risk. And so, that's the difficult part.

M: Yeah I can imagine that. So, obviously with your experience in just working with the other parts... yeah I can certainly see that. Do you think that... Um, I mean, what type of risks do you think the aerial adventure parks face?

R: Um, well I'm not really up to speed with all the new... um, late developing equipment. But I guess I am aware that there's an evolution to... um, I guess, the underlying management tool they have when they put people at height is to have them in a harness and have them attached to something so they can't fall. So, even though there's a risk that they might, you know, scrape, or get a minor injury or ankle injury, or, whatever, hand, wrist kind of thing. But I think everyone for the most part accepts that that's kind of inherent. But the risk of falling from height, for me I guess, would be the main thing. And I wonder sometimes about, you know I hear things a little bit the folks share with me, and they at this point they have a lot of courses where they harness up the participant and send

them off and tell them how to use their harness and these folks are then relied upon on their own to stay on belay basically...

M: Right OK.

R: ... as they go through the course. And I think there's some risk there because somebody might forget what they're doing or not be familiar enough and then they might not be on belay all the time. So I don't know how high that risk is, but it seems like if you're got courses where, where folks are on their own to do that, there's certainly a risk there.

M: So do you think that, um, the main attention, in terms of, um, risk management, is around the customer or do you think there are other sides, such as, um, I guess, the staff as well, um and, and the products that they use?

R: Yeah, absolutely. There's certainly, um, the staff and the equipment. You have to... I think you can manage... those are known and you manage those with training and with inspections and replacing of equipment. So you can manage that and to me... and even some other amusement devices that have cropped up at... at ski resorts particularly, um, that are more participant oriented. And those are the ones where, you know, we get more, um... in our little world, because, um, we don't represent a very big slice of the pie here... but we get more activity and incidents reports from the participant oriented things, you know, and the, and the folks that operate them are trained and are, you know, 'Well I told them, you know, 12 times to do it this way' and they didn't do it this way. And, um, so I think at some point... you know this is attractive and I think it draws business, but at some point we're going to get to this spot where the insurers are gonna back away and... and enough people are gonna be injured that there's... I don't know exactly what's going to tilt it, but, there's gonna be some of these devices that are gonna just start disappearing. Well I think I, um... I'm already speaking with the folks in the industry. There's these airbags that people jump into as an example. And there's these two or three companies that were building portable ones and we would see them. Well, I think they're backing away and one of these companies is not building them anymore and it's hard to get insurance for them. So you're relying on telling the person that this is how you have to land. And they don't land that way and, oh, you've got a sprained ankle now. It's because they didn't...

M: So they're jumping into an airbag?

R: Yeah. It's because they didn't do it the way... you know we told them. But, I don't know how much you can rely on a participant like that.

M: Right of course, yeah. Well because in the heat of the moment, you... you, um, you tend to forget what you've been told, don't you?

R: Yeah, exactly. Right. Right.

M: So, bearing this in mind, what does effective risk management look like to you then?

R: Hmm... effective risk management would be... Huh, well it's partly on the shoulders of the folks that write the standards to be put the best people in the industry together and you come up with a standard and it's based on the sum of their experience. So that's a huge... that's the first start. And then, somehow, you get the folks that are in the business to all adhere to the standard. I think that's fundamentally... that's 99% of it. Then I think you're going to find ongoing training and sharing of, um, experience in the industry, because there's always going to be something new that crops up that nobody expected. And that's what we learn from and as long as someone is documenting that and incorporating that in to the next standard, um, you know. Or even quicker than that. In the ski industry, particularly, the equipment manufacturers, something will crop up and, you know, within a day, everybody that has that machine will know to go and look for something. So...

M: Oh, OK.

R: ... I think that's key. I mean, you know I think that the standard, um... And you know, when I say the standard, I think that's kind of a shortcut way of saying, you know, I think ongoing. You know, the folks that are in this business. I strongly believe the folks, the people, the staff who are out here in the field...

M: Yeah...

R: ... and the supervisors and the operators they should all have formal training and they should all be... you know some kind of certificate where they have to go and learn and show that they've, that they've been, you know, they're exposed to all this information that is required in order to address these risks.

M: Is that something you're looking to do, um, in your state? Um, certified training and so on?

R: Well, if we adopt the ACCT standard it will require that everyone is trained. I really like, as far as a general programme. Pennsylvania is a state, it's a large state, and it's full of amusement rides. And where we do, like, 5 or 600 rides in a year, they do 10,000!

M: Oh my God! OK.

R: Right. So they... their programme is set up so that they have a certification system and the folks that inspect their rides and operate them are all required to be educated and certified and that's pretty much how it runs. And I think they keep five or six folks that works for this department to go around and check... and they're checking on those people. They don't... Well they can certainly have authority to check the rides and the equipment, but they're, for the most part they're checking to make sure that the people who are licensed are doing what they're supposed to do. And at that scale they can efficiently have programmes to give folks license and keep them up to date and do the educational component. The problem that I have in [blank] is, with the small number of rides that we do and the folks that come and go, we might see them one time a year, it's just not feasible to require everybody to be... to have a, um, you know [blank] certification. So, I like that programme, because I am a firm believer that that puts more educated people on the grounds where the rides are and that's a good thing. So, I mean, I guess, hopefully that answers your question. That's what I prefer, for what it's worth.

M: Yeah. No, that's, um... I didn't know they did that in Pennsylvania. That's, um, that certainly seems like a much more effective way of, um starting, the risk management with the staff training. So, um, is that, um, the standards that you're looking to implement? The ACCT standards? I think you touched on this earlier, is it basically just a cookie-cutter approach, or are you looking at making slight changes to, kind of, reflect your state as well?

R: Um, I, I... Um, I don't think that we would be looking at any significant changes. The only changes that we might be thinking about would be to aide our administration and how, and how administer it. But I think... um, I think we would be pretty taking that standard. Or the way I hope to do it is that standard or a significantly equal standard. The PRCA has a standard. I understand Canada has a standard and then ASTM has a standard. So, I think, for my purposes they all create the situation that's acceptable. And I'm not here to say that

one standard is better than the other. But I think we would take it, for the most part, um, as the way it was written.

M: Right. Do you think as a regulator, it would be easier if these standards were combined? Because like you said, it sounds like there's four or five of them...

R: Yeah it would be. For sure, if there was one that stood out. And back when I first started working on this, the ASTM didn't have one. So we started off with, um, after a phenomenal amount of research I said well let's use this ACCT one and try and slide language in there that would allow us to use a different one if that was what the case is, because I didn't want to get involved in the argument of which one was better and which one wasn't. You just need one.

[Laughter]

M: Sure! Yeah, I can appreciate that. Um, yeah cause that's what I've heard, just from my research so far, that people are really looking for these standards to be combined. Um, I guess, it would make it more effective, but also there's some confusion over the differences and so on.

R: Right.

M: Um, so, it sounds as though, obviously, it sounds as though you already work with other states then. Cause obviously you mentioned how Pennsylvania go about their, um, their training and so on. So, is that something you're currently involved in? In looking at other states and collaborating with them, um, on implementing your standards?

R: Well, I don't know that we are collaborating with anybody. We do compare notes. And once a year or so a state authority will chime up and say 'hey how are you guys doing this?' you know 'where does your money come from', 'how do you...' 'How much do you charge'? So everybody compares notes and there is a broad variety of different ways that the regulations are working and... but I think the argument that Pennsylvania, I've heard them use, is that, you know, the rates that they have for accidents or injuries is... is as good or better in Pennsylvania where they have four or five, basically, inspectors for 10,000 rides as it is in New Jersey where they have 25 inspectors for, you know, 1000 rides. You know, so, um, but, no I... we're not collaborating really with anybody at this point. But we, I think there's a pretty good size of group or states, because there's quite a quite a number of

states in the United States that don't regulate at all still. And so, the ones that do, I think, the means is becoming better to all, kind of electronically, instead sitting at the same table and compare notes.

M: Right, so do you see any benefit in collaborating, um, with the states?

R: Well, sure. I mean, the communication is good because it keeps everyone up to speed if there's an issue that comes up. Um, you can usually get a little information about so it so that recognises there's a risk you need to go after or if it was a, you know, 'what's going on'. And that's pretty big. And there's some inspection information that changes hands. So that... you know this equipment. Some of it is aging. Some of it is 40 or 50 years old and you know, we haven't all been in business that long. So, it's good to have the information circulating. We all try to keep a library with all that information of course. But there's a big benefit to lean on some of these other guys for sure.

M: Sure. And in terms of the aerial adventure industry, would you see any... Do you see any benefit in collaborating with them as you start implementing your standards in your state?

R: Um, yeah, I think. You know, effectively it's just the sharing of information. I don't know, you can certainly ask around. There's still a lot of states that, that don't regulate this industry and a recent, example, there's a recent couple of accidents in North Carolina over the last year or... and they were two fatal accidents if I'm not mistaken. And, um, so the legislature, I think, and I don't want to misspeak, but the way I understand it, they went to their department, the state department that would do amusements probably, and said 'you need to look into this and we need to... there's no regulation, did you know that? So we need to get this regulated'. So the department of labour looked into it and spent some time studying it and they came back to the legislator and said 'well we studied it, but we don't think that regulation of any kind would do any good, so we're not going to recommend any regulation'.

M: Oh, OK.

R: And that was in the wake of a couple of accidents. So it's interesting how there are different opinions.

M: So, what do you think is required for collaboration to work? I mean for collaboration to work within the industry?

R: Say that, ask me that question again.

M: Sure. What do you believe is required for collaboration to work in the industry?

R: Um, I think, well you need a means. So you need to have a means to communicate freely. And then, it's not that complicated. I suppose whoever is operating the programme would need to recognise if there's something useful coming along and have some way of incorporate it. But I mean the benefits of just having free communication is just pretty enormous.

M: Yes, that seems to be, if I understand you correctly, that seems to be kind of the main benefit, um, that you are stating, is the level of communication and the changes and effects that can lead to.

R: Yep.

M: Yeah. Um, do you, so do you believe that... Do you think that if you worked with the industry on risk management, do you think that could work then? Essentially.

R: Oh, I think it could. You know, the way it is set up, each state does things individually, so I think, that there's some pretty big stumbling blocks to have something where there's this huge collaboration that works across the board. Um, there's certainly, um, there's certainly some voices who are saying it's time for the federal government to step up and create a programme. And because a lot of equipment is portable in the amusement industry and they cross state lines, and therefore it's not really one state, it's everybody. So there are some people who think that some kind of... some kind of regulation that's, that's, um a bigger umbrella would more appropriate. But that time, I think, really hasn't come. Every state seems to be pretty satisfied with what they're doing. And so, I think... I don't... collaboration would be great and if we all had the same set of rules it would be better, but there's a lot of different people you would need to convince!

[Laughter]

M: Sure. Sure. Yeah, I mean and that kind of leads on to my next question. What do you feel is the appropriate level for it to take place? At the local, state, or federal, um level? In your opinion.

R: Well, I don't know, really the answer to that. But I can offer you some of my thoughts on that. [intentionally left blank] is stuck in [intentionally left blank] in between [intentionally left blank] to the east of us and [intentionally left blank] to the west of us and [intentionally left blank] to the south. Now, [intentionally left blank] had a bad accident on a ride, an amusement ride, a couple of years ago and they stepped up their programme and they had to come up with 35 inspectors from nowhere that were capable of going out, because, my God, 'we're going to inspect every ride every time it sets up'. So, they had this huge this huge thing. And they require the carnival operators to have employee back-ground checks for all their employees. So there's this huge... it's insurmountable to some companies that go like 'oh, I guess I can't work in [blank] anymore. I can't do a background, I can't afford to do all this stuff'. So that's one attitude. And [blank] and [blank] kind of duke it out. Try to get state inspectors to look at the rides at least when they first set up and they try to go back and do them and that's kind of what we do. But in [blank] which is just across the [blank] River they do nothing. So here we have a pretty broad spectrum. You know, if you draw a circle, and these guys are going right after them and doing everything, and we're trying to do the best we can with what we got and [blank] just kind of say 'well, let'em go'.

M: Oh, OK.

R: So, I think there is room, you know for some... I even had talked about it with a couple carnival owners cause... and they were like 'jeez, come on, there's gotta be something... you know this should be...'. Um, so, in a dream world you could maybe have a regional type thing, but it would an awful lot of cooperation from states. You know, we'd need basically the legislators all agreeing from various states to the same legislation and I... it's a pretty big hurdle.

M: It's a lot of people.

R: So, I think it's been thought about, but I don't... the practicality just doesn't seem to be very high.

M: Right. Yeah. No, I can see the difficulty in that.

R: But I think, to answer your question, I think it would be a benefit. For number one, we could get some regulation in [blank] so that when the fayres come. In [blank]... and you know, I'm really not talking about your industry, the challenge courses...

M: No, no, that's alright.

R: Somebody would look at it. I don't know.

M: No, no, I mean I guess, because the aerial adventure industry, and, you know, there has been talk about an incident, you know, at one park, um, can affect the whole industry.

R: Yeah

M: So it could be detrimental to your parks in your state as well. So yeah, it could make sense to do a regional one. Um, do you think, though, that some people might question the lack of experience from, um, or industry experience from, um, you know public stakeholders. Do you think that might be an issue in regulating the industry? That the person who inspects, essentially, might not have, um, you know, 20 years from working on the courses as such?

R: Yeah, that's a problem. And, as I said, in [blank] where they stepped up the program overnight, basically, they had to draw on some of the other industries for personnel and said 'OK you're gonna be an amusement ride inspector and you're gonna be...' so they put them all through and they probably had some type of training, but these folks did not have 20 years of experience. And I think, you know, I'm not going for it, but I certainly think it would help to make sure rides were inspecting every day, every time they were set up. You know, and the people that moved them sure knew more about them than the inspectors did at that point. You know, and things over time have gotten a little better and the inspectors have a little more time under their belts and whatever. Yeah, I guess that's always going to be an issue.

M: Yeah, yeah. It's just something I've come across, so I thought it was worth throwing in there. Um, so in terms of when you start introducing these standards, um, the ACCT standards, in your state, um, I guess, the ultimate control will lie with the state, um, is that correct? Um, in terms of what goes and what doesn't go?

R: Um, yes. There'll be... however the standard is written as far as design of any features and... yeah absolutely.

M: OK. Would you look, would you look to work with the industry going forward as well? Obviously, once you've introduced the standards, is that something you'd try and work on? Um, almost like a relationship with the industry, going forward?

R: Well, we, you know, we have to have to have some kind of relationship with this industry. It's just too small a group to not have a relationship. We have relationships with all the ski area owners. It's a little more difficult to have a day-to-day relationship with all the carnival guys, because there's more of them, but, um, it's always... I mean, we do have set policies for what to accept and what to not accept as far as, um, a ride or any kind of device, um, and the ACCT standard would also, also addresses it. So the way we would handle that is through, you know, our interpretation of the standard, and our interpretation of a lot of rules. And, you know, at the department of safety in any state, there's always some kind of a fall back clause where there's a law enforcement wing, which is not me, but if there was deemed there was something that was just hazardous, then somebody can step in and go 'hey, wow, wait a minute here. Let's stop and make sure, you know, we're not doing something stupid'.

M: Yes, of course. Um, well I guess with you using the ACCT standard, at the end of the day, that is standards developed by the industry anyway, isn't it?

R: Right.

M: So that's kind of working with the industry in itself, isn't it? So...

R: Yep, yeah.

M: Um, OK. Um, so do you think that... who do you think should participate in such a collaboration? Do you, do you think if you worked with the industry, would you look at just working with ACCT or do you think the more voices you have to listen to, the better, essentially?

R: Well, it's a good question. Like we talked about earlier. It would be beneficial if we could narrow this down to a single group, which is... we were out on this tramway, ski lift, and there's one standard and everybody uses it. And so... And the best ski... ski lift people in the world are on the board, consensus board that makes the rules. So that's pretty straight forward. So, but I would think that based on each of these standards that exist and the people that are involved that there's gotta be some collaboration going on anyway. I mean everybody is pretty much trying to do the same thing. And even though it's not the same people, those people are gonna talk over coffee, um, you know, in the morning at some point, I think, and I think collaboration is gonna be inevitable I guess. It's, you know, they're

all gonna sit around and go 'oh how are you guys dealing with this' and 'how are you getting on with that?'

[Laughter]

R: You know and I think that happens anyway. It's gonna happen. It's a natural thing.

M: Yes, definitely. You know, what I gather, just from talking to the industry, is that it's already taking place. It's just the private stakeholders collaborating and not so much the public, um, stakeholders, like yourself...

R: Yeah, right, right. Yep.

M: Um, and that's essentially what I'm looking at [blank]. It's whether, um, a public stakeholder enforcing the ideas of the industry, basically. Because obviously at the moment, like in [blank], it's not being enforced, the ACT standards, the ACCT standards. And whether you stepping in, basically, would make it more effective by enforcing it.

R: Yeah.

M: Yeah, um, OK well that's pretty much it [blank]. Just, last question. Um what do you think the future holds for this industry? I guess, as a regulator and, I guess, yeah, looking ahead.

R: Well, I think, it seems to me that the days of the exponential growth are probably behind us. We'll probably still see some growth and we'll always have to, um, deal with the new feature or some type of new thing that's happening or there'll be some new equipment. So as long as we recognise that the industry is not static and it's gonna be different tomorrow than it is today and we create a standard that allows for that and addresses that and doesn't ignore it, then I think that that's probably the appropriate way to get along through this. Um, I think it'll be a steady industry and I think it'll become, um, just, it'll be, you know, it'll be here forever. It's gonna be part of our countryside forever now.

M: OK. Brilliant [blank]! Um, thank you very, very much for your time and, um...

R: Well, you're welcome. You know, I am glad you're working on this and I look forward to seeing your work.

M: Definitely. I'll definitely send you... um, obviously it's a PhD, so it takes a little bit longer than the masters degree!

[Laughter]

M: But, yeah, no I very much appreciate you taking the time. And I'll send a copy of the recording as promised and then just, I'll keep you posted on how everything's going.

R: OK. Sounds good, Marcus. Thank you very much.

M: You take care of yourself. Thanks, bye.

R: Bye.

Call ended

Participant 3 Conversation

M: Interviewer

B: participant

B: Hello, this is [blank]

M: Hello, it's Marcus Hansen. Are you alright?

B: Hey, Marcus! How are you doing?

M: I'm good. How are you?

B: I'm well.

M: Good. Is this a good time? Or...? I know we didn't really agree on a specific time.

B: Yeah! This should be fine. I haven't quite gotten on the road yet, so yeah, I'm available for a little bit. Yeah, we can do this right now.

M: OK. OK. I mean, I'm happy to call back later, [blank]. It's... It's entirely up to you.

B: Yeah, I don't know how good a cell service I am going to have during the day, so why don't we go ahead and... and do this right now.

M: OK. That sounds great. Fantastic. Um... I just have a couple of checks to just run through before we get going. Um... Um, the call is being recorded, just like last time, um, obviously I will send you a copy of the recording after the interview. Um, and you do of course have the right to withdraw at any time... um, even after the call has taken place as well. OK?

B: Yeah, that's fine.

M: Oh great. Um, the layout of the interview is going to go like this: I'm just going to start off with some general questions, general basic questions, and then some questions on risk management and then some questions on collaboration. Um, if you do not feel like answering any of the... sorry, some of the questions...

[Laughter]

M: [...] um, you do of course... um, just let me know. Um, obviously it's all confidential as well... anything that's being said here on the call as well, um, in terms of your identity and so on.

B: OK. No problem. Um, if you have any problems, um, hearing me at any time, just let me know. I'm at my house and sometimes the cell reception is a little bit wavering.

M: Oh. OK. No problem at all. OK. Well, yeah, let's do it. Um, so, um, please tell me about your role within the organisation, [blank].

B: Um, well I am the president of, um... the managing partner of a holding company, um, called [blank], and [blank] owns two sites, um, one in [blank] that has a, um, eight zip... um, zipline canopy tour that uses hand-braking as the, um, primary brake. Um, and it's fully guided. Then we also have a 90 element aerial adventure park that's self-guided and a climbing adventure, which is semi-guided that's 15... I can't remember exactly... 15-20 vertical climbs that are all auto-belayed. Um, the other course that we have down in the state of [blank] is a self-guided aerial adventure park with about 75 elements and a climbing adventure with 5 vertical climbs.

M: Wow. OK. Wow. Um, and how long have you been involved in the aerial adventure industry?

B: Well, if we include challenge course programming with that, it's been 22 years.

M: Sure. Yep. OK. And, um, so, in terms of the operations that you have, are they all commercial, um, or is it a bit of a mix?

B: Um, prior to, um, 2005, most of the work that I did was, um school use and community programming. Um, corporate development work... Um, 2005 the company that I was with at the time and had incorporated went to primary commercial... we decided to focus on zipline canopy tours. The current business that I am with, which was founded in 2010, um we do do school groups and some non-commercial. But in general we're open to a play-to... pay-to-play, um, opportunity. And then we contract groups as they're interested.

M: Oh OK. So a bit of a mix, but mainly commercial.

B: Yep. We do do some, but it's not our primary purpose.

M: OK. Yeah. And so, what do you think... could you describe the current state of the industry in general?

B: Mostly in the United States or more of a global perspective?

M: Yeah, in the United States, um, would suffice.

B: Well, it's experiencing significant growth. I mean a lot of people attribute that to the commercial market, but even the non-commercial traditional use and educational use has seen, um, a little bit of a boom recently. Um, I think the educational use saw a real set back

with, um, policies that were made that prevented schools from using education dollars that weren't strictly, um, preparing students to take their assessments for a number of years. And we're seeing that come back... and then the commercial market, um, I've never separated the figures between the US and Canada. I've always just kind of combined them together, but in 2016 we'll do almost a billion dollars in revenue. Um, growth has been pretty substantial.

[Laughter]

M: Yeah, that's pretty substantial! Um... that's huge that is.

B: What I would guess is almost 25 years now of double-digit growth.

M: and that's, um, a continuous trend?

B: Yeah, I haven't seen it slow down in any way. Um, you know, since the commercial market started we have been growing at 20... 20% plus per year. Um, since 2005, which is really when the first canopy tours really started popping up in volume in the US.

M: Wow. Yes, that's incredible.

B: There's probably about 3 or 4 before that, especially in Quebec.

M: Yeah. Oh in Quebec. That's incredible that they're still maintaining that kind of growth actually. So, um... what... what do you think is the key attraction, um, to um, these parks?

B: Well, it depends on what type of park you're talking about and which age group... I mean for the zipline canopy tours and more of a gravity element we see a lot of baby boomers and active seniors getting out... you know as a primary motivation is the opportunity to get out and feel young and active again and do stuff maybe that they [inaudible]... maybe the super-grandparent.

[Laughter]

B: and we're seeing that as a trend with the grandparents. Um, travelling with the grandkids even with the parents not being there. Um, you know, and so, um I think that's the primary trend for the older population. Um, for the younger, I think the desire to play in the trees and to get outdoors and be active and do stuff that scares us has always been an attraction, but for most challenge courses it hasn't been commercially available for families. Um, so I think that it's always been widely popular, it just hasn't been marketed,

um, in a way, um, prior to 2005 in the United States that allowed most families to go ahead and take advantage of it.

M: Wow. So bearing that in mind, how important do you think the sense of risk is to the overall attraction? Cause you mentioned a bit about the younger groups and so on...

B: Well, I think... I think one of the challenges that we're facing is that we have some regulators that want to call us an amusement park device, but I think without risk there is very little reward in this type of programming... if the outcome is known in advance I don't think there's, um, a lot of benefit. Um, people are finding that more and more. You know, the challenges as we become more of an amusement park-type device to the people that are looking at it, is that, um, that the problem is that in trying to accommodate this, this need for, safer, um... what we're doing is we're saying it's safer, but to balance it out we're having to go ahead and make it more thrilling and more exciting and bigger and further and faster. And ultimately I think what's going to happen is that we may see fewer accidents, but the accidents we do see are going to be awfully [inaudible].

M: They're going to be awfully what sorry?

B: They're going to be catastrophic. They'll be fatalities.

M: Oh...

B: You know, and we see that right now with hand-braking courses that may not be as fast or as long, we do see more injuries but they tend to be much more moderate. Pinched fingers... you know somebody who's coming in a little fast to the platform and gets bruised up a tiny bit. But you know, these big automated systems where people are just a sack of potatoes and have no control, when a brake system fails or something goes wrong, and it could just be that somebody's descending a cable at 100kph and a bird flies in their path and hits them, um the injuries are significantly, um, more serious.

M: Right. Wow. Yeah, cause I mean, the bumps and bruises that's kind of expected in this... um, in this activity really, isn't it?

B: Yeah. If you tell people this is dangerous, the type of people that are going to be drawn to it are going to accept those risks. If you tell people that it's an amusement ride and it's safe, the type of people that are going to be drawn to it are people that likely may have health concerns and health issues that make them higher risk... that are obese, you know, lethargic and don't get outdoors and recreate and are going to be much, much less willing

to accept the fact there is risk in what they're doing. They're going to make higher demands on the operators, um, for their own safety because they haven't... they don't know how to take care of themselves.

M: Yeah. No, I can see that. It's about that mind-set of the customer you've got coming in isn't it?

B: Yeah. We're seeing that at our operations. You know, clients that came out to us 10 years ago were athletic, they were lean, um, they were climbers, they were mountain bikers, they were avid hikers... and a big percentage of what we see today, you know, those people, the most workout they get in a week...

[Laughter]

B: ... you know, is going shopping.

M: Sure. OK. Yeah, so, I guess, and you said this before... the industry has kind of moved from educational to a certain extent to more commercial, um, it's become more commodified. How do you think that this... commodification of the activity has, um, changed the industry? Cause obviously it's put different demands on you as an operator, for example.

B: You know, it has and it has not. There's a lot of people that claim that... that not only have we gone from educational to commercial in the financial model... or the marketing model toward trying to go ahead and bring out to us... but you know, I would say that's not always true... and that has a lot more to do with the operator. Um, I think that our program does a lot more to benefit society being open to the public than it ever did... serving schools, using community groups or doing corporate development work. Um, the people that come, come because they wanna be there... Um, it's usually families... they follow up on this experience. It's an experience that's meaningful to them. Um, you know, too often when we worked with schools groups or even when we did big organisational development and intervention... you know, they wanted the show, but most of the school teachers didn't want to participate themselves or most of the organisations didn't want to follow up the experience, so, you know, it's kind of a band aid. Or, a quick shot... you know, of learning. But it didn't really get followed up the way, you know, that I see most of the families following up this type of experience. You know, and it's an opportunity for, for kids to see their parents in a new environment and behave in a different way... and for parents to see their children in a way they may never have seen them before.

M: Right. Yeah, it's a bonding activity really isn't it, between son and dad, and so on...

B: But more than just a bonding activity. It's an opportunity to see how people behave and respond in adverse conditions, which, you know, other than stressful conditions at school, I don't know that parents get the opportunity to see their kids behave in situations that are really arduous and challenging... I mean, I guess, somebody could say, you know, on the playing fields or something, you may see that sometimes. But I don't think it's as apparent as it is when you're faced with the physical and emotional challenge on a high ropes course or on a zipline... so, yeah, I think it creates learning opportunities and experiences that in some ways are much more dramatic, and, um, I would say my, my guides give far more hugs...

[Laughter]

B: to participants that, you know, that are so elated that they've done something... now than they ever did when we were working with schools or community groups.

M: Sure. That's lovely actually. That's a nice part of the job. Yeah... But in terms of equipment and so on, has that changed at all, um, because of, um... I guess, because of it becoming commercial and you're dealing with the general public... I know that some have mentioned the smart belays and so on for example...

B: I mean, I think in general the quality that's out there is significantly better. Um, you know, [laughing] it used to be the case that if you sent, you know, 50 people down a zipline, um, one of the trolleys would almost surely fail.

M: Oh wow.

B: You know, and that, you know, that's 20 years ago. The pulleys have gotten a lot better and the... more consistent. You don't have one trolley that's coming in, you know, twice as fast as the other, because, you know, the quality situation has been worked out. You know, in terms of the smart belays, um... we use the smart belay system the [inaudible] Smart Snap. And I like that. It definitely lets me sleep a little better... you know, at night, knowing that we have that added protection. But, um, I'm... I'm not a big fan of technology until it's proven. And I think seeing that and some recent accidents, um, in the United States where, um, people have relied solely on technology. And when you do that, it's what I was talking about earlier, whilst the accidents may be fewer, um, they tend to be far more severe and in many cases they tend to be fatalities.

M: Yeah. I mean I heard, um, there was one in Florida, um, around Christmas... um, not last year, but the year before, at an indoor ropes course, um, with a guy who fell there as well. And that was one of those where, you know, you're on continuous belay, where you're hooked on all the time and he still managed to, you know, unhook himself somehow.

B: Well, yeah, that was Jim Leggit's, um, Ropes Courses and Incorporated Skytrail system. And you know, that was an engineering flaw that somehow slot through that. You know, I'm not sure of the exact detail, but I've gotta say, I've... I've... [intentionally left blank]. The volume... the people you can put through that course, um, is absolutely phenomenal. And if you look at the incident rate that Ropes Course Incorporated has on their courses, um, I can't imagine that there is anybody that has a better safety record than they do. Um, but, they're, again, being asked to push further and further all the time... you know, that new product that, that are more challenging, that are, you know, that are pushing an envelope. And I think when you do that, sooner or later, you're bound to have some surprises and undue consequences, you know. And, you know, this last year we've... in the last couple of years we've also had a number of, um, severe accidents and fatalities using the, um, Edelrid system. Um...

M: Oh. Wow.

B: Which... I like that system, but I don't think that designers are doing a very good job designing their courses to use that system. Um, and we've had people clipping into things they shouldn't be clipping into with that system and then falling from height. Um... we've had, um, with the Click-it system this last year... a, um, asphyxiation, where a participant that was charging across and then lost their balance and fell on their, their... their head then became trapped...

M: Yeah, I think I read about that one.

B: between the lanyard and they suffocated. Um, you know, there's been some great things that technology has done, but, we've also had some other problems. You know, the Saferoller has been... has been another device which has had a couple accidents recently and failures of some of the connecting pieces and they've done some recalls and replacing that. You know, um, I think some of the challenges we have is with mass-production, um, people have to be much more cautious of recalls and other things that are happening. For example, the black diamond recall, which was for over a million carabiners.

M: Wow!

B: Um, and that's a pretty serious...

M: Yeah!

B: this could be a really big issue. You know, a couple of years ago we had Petzl, who never did a recall, and I think, was grossly negligent in not recalling it, that led to a tremendous number of accidents with their... when they moved their manufacturing and cheapened up their Track trolley and their Tandem Speed trolley with bearing failures... um, where people were coming in slow cause the bearings were failing and then the operator swapped them a new trolley, and especially in hand-braking courses, suddenly they were descending the cable at a totally different pace that they were used to and they weren't braking in time and, and slamming into platforms and...

M: Wow. Yeah, because Petzl... their Tandem Speed pulley or whatever, that's kind of one of the main ones for ziplines, isn't it?

B: Yeah, and, they... what they did was they created a Track plus, which they didn't... they didn't tell people, but the Track Plus was really the Track and then they keep it [inaudible]... and, um, it was a huge shock to people. I mean, I know, we had 80% failure that year on our trolleys...

M: 80%?!

B:... trolleys that would last, you know, 5 years, um, were lasting less than 50 runs and then just went because of the single bearing... or think I it might have been [inaudible]. It just wasn't plugged to handling the speed that it had always originally handled with the double bearing. So, if anything, I'm a little disappointed. I think some of the manufacturers have been really gung-ho and pushing this market, but, I think, they've failed to understand the market and, um, you know, fortunately, for them, they've been able to... um, with clever contracts, get out of a lot of the liability... I think that's going to continue to be a challenge moving forward is that there's going to be a lot of situations where manufacturers have got to step up to the plate and be responsible for, um, for, for some of the potential challenges and also provide better guidance to, to designers on what they should be doing, um, to make good use of the product.

M: Yeah. Um, it sounds, from what I can understand, that what you're saying, is, um, there's almost an increased pressure on the designers and the manufacturers to, um, keep making things faster and so on, but at the same time, um, obviously safe still...?

B: Well, and honestly, there's a lot of junk product on the market...

M: Yeah?

B: The majority of the pulleys really just lack any... lack any imagination. I mean the Track is really the most innovative and interesting pulley that I've seen for... you know, for shorter traverses that stay under 20 meters per second. Um, but really, very few other people have innovated. I mean, most, to this trolley the process of putting them on and off is, um, very risky. You could drop equipment. You can fasten it the wrong way. There's a lot of, um, a lot of situations where, um, risk can be removed from the system with some innovative design work. Um, we just haven't seen it.

M: Yeah. Yeah. Um, so, um, moving on to risk management, um, how would you define risk? I don't need an academic term or anything, just what comes to mind when you think of risk?

B: For us it's mitigation. I... You know, I've been a big advocate for the... the acknowledgement of states and regulators that there are inherent risks in these activities. Um, at the same time, there is a duty of care that is due to the passengers or participants, um, on these activities by the operators to make sure that they have a good safety team in place and, um, are looking at things in a way... and that was one of my primary reasons for being so, so, um, active in the, um, mass production of a program accreditation... a program that will be coming out later this year. Um, and, um, and I think from a risk management system, that's where I see... most of the accidents occurring right now I think, the standards that have been out for a while, at least in the United States, have done a really good job at mitigating a number of the risks that are insurance, and it's design and it's inspection of courses. But, where we've really fallen behind as an industry is in the operational side of things. And, and when an inspection occurs, making sure it's not just a technical inspection, but a technical and operational inspection.

M: OK. And what program is that, sorry, that you're bringing out?

B: The Association for Challenge Course Technology is a program accreditation offered just like our Preferred Vendor Member. In addition to vendor accreditation this would be operator accreditation. One of the things that's been occurring for many years is that, when tasked with an inspection or a program needs an inspection, what the inspector has really been inspecting the course to is the, the, the design, performance, installation standard. And the inspector, they're looking at the structural component of the course.

But, they're not reviewing documentation and operating procedures and sitting there watching the course in operation to make sure that in fact the program has the operating procedures and the documentation and the systems in place they need. And then, two, more importantly, that they're doing the things they say they're supposed to be doing. And so, um, programs... the goals of the program accreditation are multiple. One is, to create a system which pools resources that allow operators to assess themselves against the standards.

M: Oh, OK.

B: Um, two, to educate inspectors and vendors and what we will hope to do is to create a new type of inspector called an operational reviewer to go and look, um, critically at operations and to provide operations that are deficient with the tools and resources that they need, um, to meet the standard. Um, and then three, for programs that desire to do so, a, a path that are both educational and, I hope, beneficial, um, from the reward package that we have, and the member package that we have in there, to go through a critical peer review process, um, that, that, combines a more holistic look at the entire operation. So, the operator would need to submit, um, a technical inspection, an operational review, which is more of a template report in form, that gets filled out, um, training certification and agenda, um, proof of insurance. You know, those critical elements that we know define, um, the best programs from ones that, you know, needs some work, and with that would be, we'd review and could be a stamp of certification from the association.

M: That is brilliant, that is. Um, so, basically, the focus is on the operator because that hasn't been the case before. That's excellent that is. Is that, um... because I know with the Preferred Vendor Member you have to have been member of the ACCT for a number of years: is that the case with this one as well for the operators or...?

B: No, if you wanted to use the tools you'd have to be a member of the association. If you wanted to go through the formal process and accreditation you'd have to be a member and then there's some fees involved with that...

M: Sure.

B: And those fees have not been approved by the board of directors yet, so I'm not sure exactly what those would be. We're waiting for our proposal back from the task group that's creating it

M: Sure. OK. Um... So, um, again, on, on, um, again on risk, um, how would you define... or how do you measure it sorry? How do you measure risk at your parks?

B: How do we measure risk? Well, um, well risk is a... is a... it's the associate of the potential of loss. Um, we keep detailed reports for accidents and incidents and near misses that we analyse on a quarterly basis. I review each one, but as a safety committee we review it on a quarterly basis and an annual basis. Um, you know, it's a matter of, um, looking at all aspects of a business when it comes to risk. Um, partly safety and then wellbeing to the different strategies that we employ to prevent financial loss to our... to our organisation, um, to looking at, you know... I actually look at not only the physical safety of, of participants, but, you know, what are the risks of loss for, for, um, emotional factors and people that, you know, that may lack confidence, coming in and going down and saying "I'll never do that again". Um, you know, what is our [...] what's the associated risk when it comes to, um [...] to the use of our vehicles and our other infrastructure? You know, tree life is a huge risk to us, you know, and tree health. That would directly impact our participants... if we can't keep our forests healthy and, and suitable to run the course. So, yeah, I mean, it's a fairly holistic thing to just look at what are your potential losses and critically analysing to come up with strategies and means of mitigating those potential losses through training and staff development, through insuring it or creating, um, safety policies and features around it or possibly eliminating it.

M: Yeah. So, and I guess you've probably already touched on it a little bit, but, what types of risks do you face, then, as an organisation, as an operator?

B: Obviously, from a participant side, we, we... you know, our biggest concern is the safety of the participant and the risk of everything from small bumps and bruises to a fall from heights. Fatality is a rare... a rare occasion. You know, I guess from an emotional standpoint, you know, simple teasing and goading from family members or friend groups...

[Laughter]

B: [...] that might taunt somebody to emotional distress, or I guess even [inaudible]... but you know, I think...

[Laughter]

B: I think, you know, the other risks that we face right now, um, at some of our sites are legislative and policy changes that might well put us out of business in the next couple of years because our product will no longer be financial viable.

M: Oh wow!

B: With the cost of insurance in the United States right now, and some of the states we're in, they've pushed for the, um, \$15 an hour minimum wage, which, um, I don't think that \$15 an hour at our... for our park in [blank], that would be a 55% increase in wages. Um, which translates to a 28% increase in operating expenses. Um, in [blank], that would be a 100% increase in wages. So, you know, I don't think, you know, the average... I think we're stretching what we can afford right now, cause some of our states are very expensive to work in. At \$100 for a canopy tour and \$60 for an aerial adventure park... Um, with those models, if they went through with the costs of insurance and worker's comp, I think we'd be looking at charging \$130 for that zipline tour and, um, for the aerial adventure park, probably closer to... um, \$75-79. I don't know that that's reasonable for the average family.

M: Yeah. That's a lot of money.

B: I think it would destroy adventure tourism in the United States.

M: Yeah. Is that... Is that likely to happen? Or is it just out in the air at the moment?

B: Um, it's... I think it's very likely to happen in the next ten years. The state of New York and the state of California are both committed to moving to it by the, um, 2022. Um, our state is moving to up to, I think its \$11.75 by 2020 um in [intentionally left blank] [inaudible]. But, yeah, I think it's, it's a real thing. Um, I think it's going to change the nature of a lot of these tours... transition to self-guided tours. Um, for operations that are already in place, I think it's going to be detrimental. For operations that are, are just starting to build now, if they're forward thinking in this, they'll probably be building more automated systems like Jim Leggit's Ropes Course Incorporated SkyTrail. Um, very minimum number of staff, but you can put through a very large number of people. And I think that as a result, we will see, if that were to occur, it will create a very immediate, um, growth in RnD. It's a huge investment by operators, um, into finding solutions to reduce their staffing by more than 50%.

M: Yeah. Cause, I guess you've already seen that anyway, um, just in the last... you know, since it's become commercial, that thing has already gone down since then as well. So, you'd see a further reduction wouldn't you?

B: Yeah. I think we're going to see a lot more of the self-guided that's out there. And I think we're going to see a lot more automation and even in things like the canopy tours where, you know, you'll see a lot more automated braking systems and at the top, um, you'll see

more of the continuous belay systems that, um, either there are deeds that prevent riders from going until, you know, the line is clear, and you'll know the line is clear because, because of the sensor that will determine, you know the load on the cable. And, you know, I think what you might be seeing is that, you know, people won't be going at all, because, you know, there won't be guides on, on canopy tours anymore They won't be guided, they'll be more automated. I, I think we'll see a lot more of, what I would term as the zipline rollercoasters. Like the [inaudible] one and, I can't think of the big one in Europe now that's coming out. You know, it's more of a thrill ride. The disappointing aspect in that, I think, is that, that, uh, while there is some self-actualisation in this process, when they're unguided, I think the reality is the most benefit that people will receive in participating in these, is only achieved through some type of reflection that's often the result of guides. Um, you know, prompting that experience. So, I don't... you know, I think it's exciting in some ways, I think it's going to produce some really unique experiences. As somebody that came from a background and see this as a human growth tool and still see the immense value in right now... I, I think the future we'll... we'll see lots of that.

M: Yeah. Um, 'cause, did you say that insurance costs were going up as well? Or? Um, is that the case as well then?

B: Um, well we had a really bad year as an industry this last year. Um, there were quite a number of quite serious accidents and fatalities. So, um, I do expect insurance to go up and, um typically, most of, most accidents that occur like that, the pay-out that can occur, you know, for two to three years. So, you know, I think we will see over the next couple of years, um, the cost of insurance go up. I'm not sure what that's going to mean for worker's compensation in the United States. I, you know... but mainly as general liability. Although we have seen a couple of, um, worker's comp-type accidents that the incidents were employer related and not participant related. So, um, but in general I think we're going to see... I think we're going to see across-the-board...

M: Right, OK. So, um yeah, again, um, going back to, um, risk, um, what, what does effective risk management look like to you then, bearing this in mind?

B: Well, you know, the thing that I think is most important is the use of third parties. You know, there are a lot of great companies out there. You know, Go Ape, Abraska are a couple of bigger brands that are being created in the United States, but, you know, the thing that I see over and over is: the operator that employs third-party reviewing assessments, um, tend to do, tend to do the best Um, and, it's just that... it's a growing field

with a really broad skill-set, with lots of new technology, lots of information that's not readily shared and... the more perspective people get on risk management, um, to me, you know, that's probably the key component to a good solid risk management plan. Um, I think you can hire the brightest people, um, on staff, you can, you know, you can go ahead and have really good policies and procedures and training systems, but, um, but I think having third party validation on those systems and having another critical eye on it that, that has no investment in your product, um, and no reason to look over, look past things, is, is, um, really one of the most important, um, components. And so, risk management is, for me, a series of processes and procedures, um, that we as an association adhere to, that, that are non-negotiable, that we need to make sure that we stay true to and focus on to, to make sure, and part of that is third party reviewing annually, if not more frequent.

M: Yeah. So, um, what role or impact, um, does risk management have on the overall strategy of your organisation?

B: Um, well I guess that, you know, without it I don't know that, we wouldn't... we wouldn't be able to survive!

[Laughter]

B: So, to answer your question...

Recording ended due to issue with recorder.

Recording resumed within seconds.

B: ... the world in a slightly different way, um, than they normally would. So, that they're understanding what the risk benefit analysis is and, um, and a lot of the work that we do, but also a lot of the things we do in our everyday lives.

M: Right. Yeah. So, um, what... um, could you describe the procedures in place at your organisation, in terms of, in regards to identifying, assessing and responding to new risks?

B: To new risks?

M: Well, just... Yeah.

B: Or just risks?

M: Yeah. New risks, or risks in general.

B: Um, well I mean, that's... I guess, that's a pretty broad question. I guess, from a technical aspect, you know, we, we provide, um, daily and periodic professional reviews.

Professionally, we're under review then annually. And I would probably do them more frequently than that other than the fact that I have, um, very qualified staff on and they themselves are professional designers and builders, um, which I think is above what the average operator has. Um, but, as far as the policies and procedures, you know, we have spent a lot of time and energy on staff training and development. Not just in-house, um, but, you know, rewarding our staff that go out and experience, you know, other courses, that, um, you know, paying for it and rewarding them for going to trade, trade conferences like ACCT. [Intentionally left blank]. Um, you know, and participating in the industry as a whole, I think, I, I, my biggest thing the staff, that I always, that I always really push, and it's the same thing as a consultant, that I push to my client, is that I think the biggest, the biggest problem to me in the industry with risk management, and one thing that I want to make sure doesn't happen with our organisation is isolationism. And, and I think the more that we invite other operators, um, and programmers, into our, into our organisation to look at what we're doing and share their thoughts and the more we go out into the market and look at other people's stuff, um, the better that we are to critically analyse what it is that, that we're in this for and why we're doing this and what are we doing right and wrong. In terms of processes and procedures, I mean, we have, if you look at the ACCT standards, I think we've done a pretty good job and made a really good effort to adhere to the ACCT standard, as far as having a safety committee, um, and doing regular reviews of our procedures. But, I, I think that more than others, I think our programmes, even when they're self-guided, have been really focussed on our staff. And, I, you know, it's always been a feeling of mine, um, you know, Jim Leggitt, um, you know, runs... ran a park [intentionally left blank] and when I first got to know Jim, he shared with me, you know, "I can't sleep at night, because I'm afraid someone is going to unclip from one of our courses and fall from height". And so, his solution was to come up with that SkyTrail, where, you know, staff are not relied upon, that, you know, this is something that, is, is system-based and it's the engineering that takes the risk out. We've kind of taken a slightly different approach with the model. We use technology, but my focus is on that, if you're concern is on the staff, it's because you need to invest more money in your staff.

M: Sure. Yeah.

B: And, so we invest a lot in our staff time... time-wise and financially, for us, in training.

M: Um, right. Um, and so, I think you've just alluded to it as well, but, you follow the ACCT standards. Is that right?

B: We, um, we, yeah, we use the ACCT standards as our guidelines and the courses that we have built, there's some places that we're looking at opening that are ASTM. And, um, [intentionally left blank] F-24-61 sub-committee, which is responsible for the development of the F-29-59 standard, for, for aerial adventure courses.

[Intentionally left blank]

B: ACCT have been heavily involved in working with ASTM to try to figure out a way to align the standards. [Intentionally left blank] advocating for a, for a more, um, consistent standard between both ACCT and ASTM, so that there is less confusion and discrepancy in the industry.

M: Oh. OK. Um, yeah, 'cause one of the things I've come across, in just um, doing the research and so on, is that, um, there's a lot of talk about the need for combining the standards that are out there. Is that something you'd like to see happening as well or?

B: Um, it's something that I'd like to see happen, but I, I don't think it's the reality, so I don't really care.

[Laughter]

B: Um, it's clear in the market [inaudible]. I think in terms of ACCT and ASTM, yeah, we're going to see a lot of collaboration between those two. Um, there are several overlaps in the two, um, but I think we're going to... you know, both parties have their own memberships and reasons for doing what they're doing, so then there's the PRCA standard, um, they are what they are. Um, I'm all for an open market place. I think the fact that there've been multiple standards that have been put forth... I think it's a positive thing actually. I think it's negative in the sense that, 'cause I work as an expert witness, that you might have to defend yourself to multiple standards. Um, but most states allow for, um, allow... somebody to choose which standard that they're working for or they define which standard, um, as a jurisdictional authority that they, um, expect you to meet. So, um, it's as confusing as most people would like to think and the reality is: if you follow any of the three standards, you're going to be doing a much better job mitigating the risk to your, to your participants and to your operation than... you would be if you weren't following any of them. Um, it's not particularly realistic to say you would follow all three, because, um, they are contradictory in some areas.

M: So, they are, are they quite different, um, then basically?

B: Well, they're not... they're not all that different, um, but, you know, they're, there's some challenges that if you were an international association, following the PRCA standards could be quite challenging. Um, part of that is the ACCT standards is looked much more openly at the international market when they're writing the standard and I think as a result they've taken input from ERCA and from representatives from Europe and abroad. Um, especially in Asia now, um... that have [inaudible] some changes, um, in our standard which calls for a slightly lower, um, limit for some of our anchorages and personal safety equipment. Now, it's not, it's not substantially lower and I, in fact, I can't foresee, ever in my life, that the, um, minor difference that that's in there would ever result in a significant accident. What it's primarily attributed to is, um, there's some difference, um, between the standards as they're presented, um, by NFPA, which is National Fire Protective Agency in the United States, and then the UIAE and the CE standards.

M: OK. Oh, I see what you mean. OK, yeah.

B: and, you know, so, like PRCA has tried to align themselves completely with NFPA standard, you know, to which my kind of comment is, you know, we're not, we're not running courses where we're surrounded by groping glass and fire!

[Laughter]

B: Of course the NFPA standards have to be higher. They're working in the most extreme conditions that one might consider when it comes to temperature, sharp edges or unknown variables. Um, a lot of the disc... the minor discrepancies that occur too are just a matter of the conversion from metric to standard.

M: OK.

B: You know, right?

M: Sure, yeah.

B: So, so, twenty two points for kilonewtons in the United States, what do you round it to?

[Laughter]

M: Yeah!

B: You know, like, so, twenty two points, twenty two kilonewtons would, would, um, would be the common, um, the commonality for five thousand pounds force, but it's slightly less.

So what happens is a lot... to round it in the, you know, the metric world, they'd say twenty kilonewtons. That's what you're going to build to. Well, we expect, in the United States, we expect 22.1.

M: OK. Yeah.

B: So it's like... and that's, and that... you know, PRCA is the thing you gotta use the US standard, 5000 pounds, and we're saying, well that's fine, but the international world uses slightly less, and it's not a big deal...

M: Right, but it just causes...

B: Yeah, we're talking about a five hundred pound difference, which, if you're getting anywhere near that, you've already exceeded what you should be doing by huge margins! Right?!

[Laughter]

M: Sure. Yeah!

B: So, there's these weird... there's these weird issues that are partly, you know, created by the standard of measurement that we use and are partly... like how do you... how do you bring all these other standards that may impact challenge courses in the world and combine them? So, it's not... you know, when people concern, are concerned about the PRCA vs. the ACCT vs. ERCA vs. the ASTM and all that stuff, that's relatively trivial when you say that, what's the comparison between ACCT, ASTM and, you know, OSHA, which is our occupational safety and, um, health administration standard for what, what's expected for fall-protection for employees when they're on the course, um, cause the standards weren't ever really designed to, to include things like challenge courses. They were focussed on, you know, workers falling height, safety for construction workers and tree workers and, you know, people that were working on manholes, you know, or, you know, how do you go ahead and do that combination at NFPA, where, you know, NFPA would mandate that rescue lines are 12.5mm or half inch vs. typically in, in light rescue, like we're working in, there's no reason to not go with a 3/8th inch. Or for a 7/16th inch rope that's closer to 11mm.

M: Yeah. I guess so. Yeah, I can see that issue. Because, I guess, you said OSHA, I mean it's not, it's not really designed for challenge courses anyway. So...? Yeah...

B: Yeah, well for example, if OSHA were to require that all our workers are clipped in [inaudible] between the shoulder blades with a fall limiting device, so what you have here, and the reason for that is in a construction site, somebody might fall, and they may be hanging in there for 10 hours before they can be rescued, vs. on a challenge course, the standard of care is typically that somebody can be rescued in under 4 minutes.

M: Yep!

B: Like, there's... you know, and further, hanging from your soft [inaudible] provides very difficult working conditions to perform any type of rescue!

[Laughter]

B: You know, it's just... so, when people talk about the concern about ACCT and PRCA I'm kind of a little... you know, a little miffed about it, because there's much bigger issues that, at play here, that are a lot more concerning when you talk about uniting the standards and how do we do this? And the reality is that if people make a good faith effort to meet the current standard and to educate themselves in what's going on in the workplace, they tremendously reduce the amount of risk to their operations and to their participants. Um, it doesn't matter which one they follow, just... any in general. It isn't going to make a huge difference.

M: Yeah. Just follow one of them. And, in terms of the, the states that you operate in, does the state, does it influence risk management procedures at all, um... as far as you're concerned?

B: The state of [intentionally left blank] does not regulate, um, ziplines currently. I think they will in the near future. The state of [intentionally left blank] actually by law says it's ASTM. Um, now, we've had some meetings recently with the state, and they... they may accept ACCT. They're currently accepting ACCT standards, um, but they may accept ACCT and ASTM... They may accept both. They're going back and forth. They, the case that ASTM would make is that we're a more stringent standard, the case that ACCT would make is that, we're, you're talking about a margin of difference here that is irrelevant and what ACCT offers is a system of not just a standard, but we have a certification track for inspectors, so we know that our inspectors are qualified and you can find qualified inspectors. We have a... we have an accreditation track for vendors so that operators that wanna build these things know where to go to find somebody that's been peer reviewed and is credible. You know, it's much... we have operation... that program operation

accreditation coming out. So, ultimately, I think, the, the thing here is not the standard and this is the challenge, I think, with ASTM. You know, ASTM is a nice standard, and I think... and I will say, I think ACCT and, um... ACCT has learned a lot, and still has a lot to learn, from the incredible process that ASTM offers for developing standards, because it's really... it's awesome, it's open forum and it just... it just works. I mean, now, it works because of the incredible effort of a very few people, but it is open forum and it's transparent and... you know, it has a lot of great qualities. The thing, um, that I think is different, though, with the ASTM and ACCT, um... ASTM doesn't have a certification process...

M: Oh.

B: It relies on NARSO and AIMS inspectors, which, um, has... have done a good a job when it comes to your typical amusement ride device, um, but most of those inspectors that are qualified to inspect the ASTM, um, don't really understand what's going on with ziplines. Um, you know, they're used to looking at hydraulic systems and, you know, mechanical systems and having operators and lock-out boxes and all of that stuff and that's not... that's not what ziplines have! There's... there's some work that needs to be done and there's some thought that needs to be given... um, by states, when they adopt these type systems about, um, great this is the standard we're going to use, but how do we actually utilize that in a way that's going to impact participant safety and not just create a mess where we now have unqualified people going out and inspecting courses they know nothing... about.

M: Oh, OK. So, and that's what you were saying about the certification, that the people that are inspecting are basically people from the amusement ride industry pretty much?

B: Well, some states that are requiring ASTM are requiring that you be NARSO and AIM certified and if you are NARSO and AIM certified then you can inspect the course. And... that's... irregardless if you've never been on a zipline in your life or not!

[Laughter]

M: Oh. Wow.

B: Yeah. There's some interesting things that are happening. [Inaudible]. You know, so there's a lot of education that needs to be going on and, you know, that's an area I think ACCT is really starting to push on, but has been a little bit behind in, um, because it is complicated and, and furthermore, it's extremely expensive. Um, it takes a lot of resources to lobby states... and to, to help educate these states and so, you know, we're trying to figure out ways to that better.

M: Ok. OK. And so, obviously, so you have, um, two or three parks it sounds like. How do you, um, monitor that, um, your staff, that, um, inspect the courses, um, and so on, how do you manage or monitor that these risk management procedures are actually followed through?

B: Um, we have, we have a software that I developed that... that's a time tracking system and also, basically, um, functions as a challenge course portfolio for our employees, so I can look at who's had training, who hasn't had training, um, and then I really just... I have really good staff... that's, that work for me, that are, you know, in charge of making sure that all the things that we have run the way they're supposed to run.

M: Wow. OK. So it's all digital really. Wow. OK. Nice. Um, do you think that, um, an incident at one park, um, impacts the rest of the industry?

B: Oh, absolutely. Yeah. It's... You know, and it's... there's been a big challenge and a lot of contention where, um, some... there's been a couple of parks and people that keep asking how is it possible that they're being insured for this and how is it impacting us. And, you know, you know, one insurance provider told me, they're like, "listen I've got to figure out... I've got to make the assessment of what, what actually is in the best interest of our business, but also what's in the best interest of all, all of the other clients that I have. And, sometimes it's in the best interest for us to insure people that we don't want to insure, because we can be the advocate and the voice in the back of their head that says, you have to change and do things differently". Um, you know, and, and we're going to charge you at a really, at a really incredibly high rate until you do those things, and, you know, versus, taking the risk of saying that, we're going to turn you down and, you know, they're going to fleece some other person that doesn't know enough about the industry, that thinks that, you know, they're the bees knees, and they're a great operator and gives them a really go rate and they go out and have an accident.

M: OK. Yeah. So... Yeah that seems like a much wiser strategy, really, to... for them to try and influence them that way. So, are there, are there lot of insurance providers out there then? Because it used... well, it used to be that Hibbs and Hallmark was the main one wasn't it?

B: There are... there are more and more people that are jumping in to the insurance game. I mean, Granite out of North Carolina is another that has a number of clients now. Um,

that... the others that I've been looking to, whilst they offered really competitive pricing, they didn't really have a very good track record and when I asked if, you know, if I could get references, you know, some of the people they give me in referral and the people they were insuring... I was pretty horrified! I didn't want to be in that pool, because I was afraid if they had a serious accident we'd be in trouble. And that's kind of been... you know we're still with Hibbs and I like Robert and, you know, he's been a good friend for a long time. And, um, the one thing that I've always been comfortable with him, is that I think Robert makes some very well educated decisions, um, about the risk to his company, and I have never, since I have been with Robert, between a couple of companies probably about 12 years, had our insurance cancelled. Prior to that we were regularly being cancelled.

M: Really?!

B: Um, you know, we had the insurance... the insurance guy come out and they would want to measure the door-ways, the height of our stairs and all of this stuff, but they would never come out to the course! And we'd be like, geez, this isn't even our building.

[Laughter]

M: Yeah!

B: Um, this, you know, you need to come back here to see where, what we're doing is. And they had no interest. And then we'd send them all our manuals and we'd send them all this stuff, and ultimately they would send us a notice that says we didn't know you were running a zipline, you're cancelled!

[Laughter]

B: ... what do you mean you didn't know?! You can't...

M: Oh my. How incompetent is that. Oh man. That's awful.

B: Well, let me say, in general I have had very few positive experiences with insurance companies, other than with the insurance company we're with currently. The, the, um, the underwriters that we have through our Hibbs program, um, I have... they have been phenomenal. Um, in addition to being an underwriter that focusses on ziplines now, he also focusses on fireworks displays and pyrotechnics and rodeos of all things!

[Laughter]

M: Rodeos?! OK.

B: And, so she, the underwriter has a really good sense of risk management. So it's been phenomenal to work with her. I mean, we've had... we've invited her out to our site... you know, it's, it's... and that's the hard thing, I think, with insurance. It's easy to find insurance, it's really tough to find a partner in what it is that you're doing. And that's what I've kind of been fighting for, um, a long time trying to find. And I think, you know, I'm excited that I think we've finally found that, um, which is somebody we don't fear will come out and turn down our insurance, that we can kind of view as their, their interests and our interests are aligned, and I don't think... unfortunately, I don't think that the, um, the view that most of people take with, um, with this type of process and as a result I think it just hurts the industry in general.

M: Yeah. What's the name of that insurance company or person?

B: Um, this is through Hibbs. That person's name... first name is Melissa. Um... what do they...? Oh my God, I can't think of the name of the underwriter, all of a sudden.

M: Oh, that's alright.

B: It's, um... Oh my gosh. It's um... You know, I'm going to have to look it up real quick.

M: That's OK, [intentionally left blank]. That's just one of the things I'm interested in this time around. Also to speak to the insurance provide... providers. Um, because obviously they have a huge impact as well on risk management, like you just said. Um...

B: Yeah, if I can think about it, and I can find her information, I'll send it to you. It is... it is... She'd probably be a tremendous resource, 'cause she's had a big learning curve on the industry when she got in about two years ago to start doing the underwriting stuff.

M: Yeah. Oh, that's brilliant. OK. Um, OK. So, um, moving on to collaboration. Um, you've already talked about, um, how you'd send your staff out to other parks and so on, um, for them to experience other places. Um, so, would you describe it as a pretty tight-knit community within the industry?

B: Um, there is rapport and I think that's, you know, that surrounds the ACCT community that is very tight-knit. And, you know, and I think like I said, the biggest fear I have is isolationism. When I do these... when I do these inspections and I do a bunch of work as an expert witness... um, the... one of the contributing factors that I find frequently in accidents, is the, um, the failure from operators to network and to go out to community things. And, I... there's a lot of great things that ACCT does for the community, but I think

first and foremost, um, the number one thing that they do is provide an opportunity for networking and community. Um, and I would say in our community, if you look at just the commercial realm, probably 20% of the businesses are active in ACCT.

M: 20%?!

B: And there's 80% of people that, if they come once every couple of years, I would be... that would be great. But, I think as the industry grows, we're going to find that, if we're unable to, to bring a larger portion of those people into these network, either through the national, um, conference that we do, or by creating more regional conferences, we're really going to struggle. Um, and, in managing the risk is at play.

M: Yeah.

B: That's, that's, that's because people aren't keeping up with what the prevailing... the prevailing practices are, and, um, mitigating the risks through education, which results in accidents and pay-outs.

M: Yeah. Um, yeah, 20% that's, um... but it sounds, though, the people that do collaborate, they take it quite seriously the, um... and you, you, um, you collaborate with other organisations as well then?

B: We... yeah, we have a, um, very good relationships with quite a number of operations and builders out there. We, one day this weekend I'm going to a, um, a luncheon that's being put together by an operator down in [intentionally left blank], um, to meet people down in that region. And, I, I think more than most, most, any other company out there, I make it a habit to try to get to 20-30 parks a year that... and, um, you know, because I've been in the industry for so long, a lot of people know me, if I call and just say hey I'm going to be passing through your area and, um, would love to stop by and see your park, um, we can go on the tour, would you be willing to exchange that, um, you know, for a free tour for a, you know, couple of hours of consulting. You know, most people are usually say yes right away. And I really push them. In fact, there's an article that should be coming out in [intentionally left blank], it was originally published in...

M: Oh, wow. OK.

B: ... it was originally published sometime this fall, maybe September or October for [intentionally left blank] for ACCT called [intentionally left blank]. And [intentionally left blank]... It says [intentionally left blank], they actually added and additional... so it's four

things operators should be doing now. But, it should be coming out in this next issue of, um, [intentionally left blank]. But, those things are... to, um, to go ahead and have a, um, secret shopper system setup with this other peer to network or trying somehow to participate in operational reviews, to reward staff, and to make it a commitment of your association or organisation to get out the other people's courses. And then, the last one is to have someone review, review your online marketing and all of your public materials, because too many people make these incredibly bold claims: we're the longest zipline in the world or we're all... you got it. And those things set them up in court to just get slammed.

M: Yeah. Yeah. Um, that's a brilliant idea – the secret shopper actually. That's fantastic, that is! Yeah, I've seen some, um, some, you've... because you've done a few articles in [intentionally left blank], haven't you?

B: I have one that I did jointly on risk management, um, in the initial article. It was one of the... I think it was the initial piece, the initial magazine that came out in publication and, I don't know if they credited me or any of the other publishers. But, in the first couple of months that they were putting the magazine together, I pretty much edited every article that they had.

[Laughter]

B: It really helped with the efforts they put in and as a result, um, they've given me free advertising on the, on the website, for a number of things, which wasn't expected, but it's been very... you know, really nice. I... for me it's not that important, because I'm not really building for other people, so, like the value isn't huge, but it's nice to be recognised for the contribution in that way.

M: Sure.

B: Um, but yeah, so there's... you know, that's article is coming out, in this one, and then there's another one that kind of joins that, which is just a shorter article on program accreditation and, you know, what's coming. Um, so there's two articles in the upcoming, one that I put together...

M: Right. OK. Um, so, um, just going back to collaboration then, what do you think are the benefits of collaborating?

B: I'm sorry. You broke up just a little there. Can you ask that question again?

M: Of course. Yeah. Yeah. Um, what do you think are the benefits, um, of collaboration?

B: Well, I think, um, one, obviously, is it's insight. You know, and as I talk about this article, I, I think I learned as much, if not more, by going out and secret shopping and reviewing other sites that, you know, I can actually provide to anybody else. You know, I think, lately, I've been doing a lot of expert witness... stuff on accident investigation and I'll tell you; it's interesting work and, um, I, um, I... sometimes I hate the fact that it takes me away from my business, but it's produced more [inaudible] on risk management in my business than probably any other thing that I've done, because, I... when you start looking at... you know, most people think that, if it goes to court, you know, well we have defences for this. Or, you know, or, they're in the mind-set that, well it's just not going to happen to us. And, you could actually sit down and watch what happen when you do have an accident, a really serious accident that results in litigation, and, you know, how tricky and clever a play a... an attorney can be. And, um, you know, you just really start looking at, you know, your organisation in a very different way. Um, and I think, collaboration does that, um, in a way that, maybe isn't so in your face, but, um, I think when you start going out looking at other people's places, it's not only looking at them for them and seeing what they're doing wrong and what they're not doing wrong. But, in many ways it's looking through that third eye at your own place and say, you know, are we really justified in doing the things the way that we are? If I'm going to disclose it to somebody else, I better really feel pretty, really confident about what it is that I'm giving advice on.

M: Sure. Yeah. And, do...

B: Yeah, over the years... I've had the, the, the, the... the fortunate opportunity to train some really incredible people like [inaudible] or Navitat or... [Inaudible] really just a number of the top... the top canopy tour operators were, um, were clients of a buildings company that I worked for when they first started. You know, those types of relationships just go a long way. We're seeing it on an annual basis between our sites in [intentionally left blank] and [intentionally left blank], I think we have 25-30 professionals come out to our site. You know, some years it's one or the other. We have... Um, [intentionally left blank] built the course and inspected the course that had the accident, um, this last year, but [intentionally left blank] and working with that. So, we're actually, um, active in this exchange in at one end and taking my management team over to their site, um, to look at how they're doing things, and you know, what systems they're implementing. Um, they've already brought

their management team over to our site and kind of look at how we're doing things. And, I think, in the long run, that kind of relationship is just... well, one it's [inaudible]

[Laughter]

M: It's what, sorry?

B: One it's free for the most part! Obviously, there's the investment in my staffs' labour and their investment in their staffs' labour, um, but it's, it's just so incredibly valuable to both of us...

M: Mmm.

B: ... to be able to validate and justify the actions that we're taking on our courses and how they impact things. You know, if I was going to call a third party that's probably going to paying \$1600 a day...

M: Yeah, and here you get it for free instead.

B: And they'd only be validating whatever it is that I'm doing at my site. This, in going out to another site and doing that exchange, not only when they come to ours and they validate what we're doing, when we come to their site it's, it's further validating what they're doing and for us what we're doing. "OK, other people are doing it in the same way as us, or they're doing it slightly different, you know, we should put together a... a task to see, you know, an a-b analysis, to see, like, does this really make a big difference?". And that critical factor that we've overlooked, that, you know, would save us time or money, or would improve the quality of our programme, or, you know, you know, any of a number of potential outcomes.

M: Sure. Yeah. OK. So it sounds as though... um, certainly from your side, collaboration is really a key part, um, already at this point. Um, but do you think that there are any drawbacks...

B: Marcus, I'm sorry, I'm [inaudible]. I'm losing you. Can you repeat that?

M: Oh sure. I was just, um, I was just, I guess I was just confirming it more to myself...

[Laughter]

M:... that collaboration is already something you take very seriously, but, um, do you think there are any drawbacks to collaboration?

B: Oh, sure. Well, I mean, there's a vulnerability in opening your organisation up to other people. I mean, there's, that's, there's no doubt about. I think that's where people get really frightful, um, about that, um, you know they're going to know how much money we know. Um, you know, they're going to learn stuff that we paid a lot of money for and, um, there's definitely a fear of that. You know, I've definitely gone to plenty of courses in my life where I've been turned away, because people recognise me and they said we do not allow you here. And I have a good friend that actually, that, that is always telling me to complain that, you know, somebody came to their course and took all these pictures.

[Laughter]

M: Oh, OK. Yeah.

B: And, and I just think it's so absurd. There's nothing really proprietary about this.

M: Yeah. I guess, the pictures... I mean the pictures, they could find them online anyway, so what's the big, so what's the big deal?

B: Yeah, and that's the thing, right? And I... if somebody came and, and stole my operating manual, which I've put a tremendous amount of time and effort into, making illustrative drawings and making it look really professional, you know, I, I would be noticeably aggravated and upset and probably take action. But, you know, that's not what most people are doing. Most people are coming in asking questions and they're doing it for the purpose that they want to improve their operation and site and, I think, it's that isolationism and, I think it's an arrogance, um, that, that is really prominent in this industry with operators that aren't part of the community. Most of the operators, I've found, that are part of the bigger community, even though, and it's a little different in the operator world, because of most of us are so spread out it doesn't really matter, but, it's a... it's definitely a dilemma in the construction industry. I mean, people get really territorial and you can really work anywhere you want in the world in this market, um, but you're often bidding against people that are your friends. And so, there... there is this situation, especially in the building world, where people are very secret sometimes about the... what they charge. But, noticeably what you'll find is that the companies that are doing the most business in the world are the ones that collaborate the most. They share projects, they outsource projects, they, you know they work together and those are the operators that are actually, financially, doing the best. I think, that's probably true for operators, although it's harder to, harder to see, um, you don't see the collaboration as much between

operators, um, it's just not as apparent, as, you know, if, if you talk to builders, they're like "oh yeah, so and so is out building platforms for me this week, 'cause we needed an extra guys and it's free labour".

[Laughter]

M: That's interesting, because when I first started looking at doing this as a piece of research, one of my supervisors said that you'll probably find that it's the smaller organisations that collaborate, whereas the larger, um, perhaps don't see the need for it. So it's... that's actually interesting what you're saying there.

B: Um, no... I don't think that's actually true. You look at the really big organisations, um, and they collaborate probably as much, if not more. The smaller organisations are generally the ones that I've found are more isolationist.

M: Oh, OK. OK. Yeah. And, um, so, um, I guess that kind of leads on to my next question, is, um: what do you believe is required, um, for collaboration to work?

B: Um, can I ask you, Marcus, and I, I apologise. Is there any way we can resume this in about twenty minutes? I just, I, I gotta get a couple of things packed up and get on the road today, because I've got an 11 hours drive. Is there any way we can, um, I could have you call me back in about 20 minutes? I'm happy to... to spend plenty of more time with you, I just need to get, um, on the road.

[Laughter]

M: [intentionally left blank], it's absolutely fine. Of course. Yeah, shall I call you back in... um, so that's 4 o'clock here, so what's that? 11 o'clock your time?

B: Well, yeah. Right now it's 10.30am my time, so 20 minutes from now I'll be more than on the road.

M: Yes, of course. That's absolutely fine. I'll speak to you in a few minutes.

B: Thank you. I appreciate it. Thank you very much, Marcus.

M: That's alright. Bye.

Call ended.

Call resumed.

B: Hello, this is [intentionally left blank].

M: Hey, [intentionally left blank], it's Marcus. Are you alright?

B: Hey, Marcus. Yeah. On the road finally.

M: Oh, good. That's alright. I'm sorry I have all these questions. I know you've got other things to do.

B: Oh, no. That's great. No, I'm happy to have this... this is a great conversation to have. Um, I, you know, I'm happy to have it, so yeah. Let's go ahead and resume.

M: OK. Good, so, um, yeah, um, we were talking about collaboration, and so, I was just... the question was: what do you believe is required for collaboration to work?

B: Well, I think, first and foremost trust. You know, I think, if trust is breached there and or somebody feels like the other person is getting none of it, then, um, you know, it generally doesn't turn out positive, um... but I, I... the other thing, and this goes along with trust, is having the other person's best interests in mind, um, when you're doing this stuff. So, when you're selecting somebody to collaborate with, you have to be very cautious and make sure you make, you know, the right decision. And, you know, to some degree, you have to be careful about how transparent you are and how open you are about certain things until you've established that relationship. Um, I don't just go giving my manual and financials to everybody, but, you know, there are certain people that I have developed relationships with over time, I know they wouldn't do anything to damage my business, um, and I am happy share that information at a higher level, than I would be with some, you know, that just comes down the way. And, at the same time you have, you have to realise, sometimes when you collaborate it can hurt your business. I mean, we collaborated with the ski resort that was next to us in [intentionally left blank] and they went and spent \$2.5 million two years ago and a huge course right in our backyard that is, basically, our course, but a lot more expensive and a lot larger. Um, you know, um, and they knew everything about our business, um, as a result. Now, in the long run, things aren't going as well as they had hoped for them, you know, and we may end up taking over in managing their site. So, now there are benefits and there's drawbacks, but you know, last year it financially beat us up pretty bad, and you know, what will happen with this? I'm not sure. But, yeah, you have to, you have to be aware that, um, that there are potential risks in collaborating. Um, you know, I think it's really important to find people that you can collaborate, collaborate with at different levels too. Um, you don't just want to find people that are always below you, as far as skill in what they can offer, um, or vice versa, you

know. If you're always working with people that are much more skilled than you, um, the relationships are bound to be one-sided. So, you have to kind of make sure your network extends to a variety of different areas, where you at least for some part of that can be the expert, or provide something of value. If not, and you're always under the... being the person that provides less value, you know, you need to look at it differently and, potentially, look at being out of collaboration and at least for a portion of it, hire and retain the other party, um, and reward them for the insight they provide.

M: Yeah. So, um, in terms of these skills, I mean trust and so on, um, do you think that these requirements exists, exist currently in the industry?

B: I'm sorry, Marcus, you broke up a little bit again. Can you repeat that?

M: Sure. Do you think that these requirements, um, exist in the industry, um, at this point?

B: Do they... do the requirements? I don't know that they're requirements... um.

M: Right yeah. So you said that trust is required for collaboration to work and so on. Um, do you think that these skills, I guess, do you think that these skills, that they are there in the industry at this point?

B: Um, you know, I think there's, there's quite a number of people that are just highly social and collaborate quite a bit and run, um, very good businesses. Um, there are a lot of people that, again, I've never seen them go on anybody else's tour, um, you know, when I go to do an accident investigation it's clear they've never spent the time or resources to send their staff out to go to other tours, and, you know, in a lot of those cases, um, I find that the accidents that they're now defending themselves against, are really obvious things, I think. You know, in the case, or the one that I'm doing right now, the zipline was pitched so steep that, that a rider could come in at 400, at 45mph, um, to a platform that's only 6ft between the edge of the platform in the tree and needed to be stopped with a prosic brake. You know, the potential consequence of hitting that tree without any braking would be the equivalent to jumping 81ft off a building and hitting the ground. And, and, had they collaborated more, I am confident that somebody would have said "hold on! This is way out of the normal range of what we allow for participant braking system, um, you really need to redesign this line". Um, you know, it's something I think it's hard when you're, when you're new in the organ... if you're a new operator, um, it's hard to collaborate unless you happen to pick a designer, or a builder that as part of that relationship, you know, links you into that larger network. You know, we... when I used to be a builder, a requirement

that we had, um, of, of our clients, before they worked with us, they had to go on 10 zipline tours. And, we would want some of those to be ours, but most of those we'd want to be other people's. And, then we'd have a conversation with them, um, before we proceeded and say, you know, what did you like about this and what did you like about that experience? And, you know, you understand the product that we can deliver, versus other people. And, we lost a lot of clients that way, but the clients that we did work with were the people that we really wanted to work with, that we knew valued our product and were willing to pay the price that we were asking for our product. Not some shady builder that was... you know, didn't know what he was doing, that we're together. You know, part of what we offered those clients was, you know, we required that they become a member of ACCT, we required they attend conferences with us, um, you know, we did a number of things that introduced them to other people, and, you know, not just people that we'd built for either, although we strongly encouraged them to create a network with everybody else we'd built, so they could swap staff and improve their training, or trainers by having their trainers go work at another site and go see other courses. But, you know, I think that was a service that was very undervalued, that we provided. In fact, most people were, you know, really annoyed that we would ask that. But, as I said, as a result we've not seen any lawsuits from our clients coming back at us. Um, we tend to retain pretty good working relationships with our customers. And even though once in a while they'll go something with somebody else or call somebody else in, typically they'll come back to us. And so, you know, it's really hard though, for a new operator, you know, in the case that I was just talking about, about the really fast zipline, not only did I find that their builder was totally incompetent, he, by far, was one of the most arrogant people that I have ever met and claims to be a leader in the industry and yet I have never seen him participate in any trade association, whether it was ACCT or PRCA. Um, I've never seen him participate in ASTM. And, to me, part of being a leader in the industry is giving back to the industry, through a contribution, through a financial contribution, but also through your time and labour. You know, um, it was very clear that this person doesn't go on other people's tours. Um, you know, thought what he was doing was reasonable. Um, and it may have been reasonable 15 years ago in Costa Rica, but it's not reasonable today, certainly not in the United States.

[Laughter]

M: Sure. It wasn't like his first course he built then?

B: He claims he's built, built or participated in over 100 builds world-wide.

M: Flippin' heck!

B: I don't know if that's true or not. In the United States, I think he's built at least 30 courses.

M: Wow. OK. OK. So, these, um, other stakeholders in the industry, operators and so on, that may not be participating in collaboration at this point, um, how do you believe that they can be motivated to participate? How do we get them out of this isolation?

B: Well, I think... I think that there are a number of things that ACCT is working on presently to, to solve that problem. One is that we're looking at creating more regional conferences and, or, get-togethers. Um, we are, um, working on introducing a new after-program accreditation, a new e-learning system that would provide resources to our members. Um, currently, um, as a start-tool, that we call [inaudible], and putting it out there. But, I think, ultimately, things that's going to, um, really help people in to be more collaborative that jurisdictions are going to start regulating... you know, there's only, I think, um, 13 states right now, that, that, that regulate ziplines, um, out of the 50. Um, but that's going to change and it will get to the point where all states are regulating and it will be more and more important for people to collaborate, figure out what they need to do and they'll be, you know, encountering people more frequently at regulatory meetings. So, you know, I think that's naturally going to spark it. And, also, the reason that I stayed in this industry in [intentionally left blank], when I'd actually left, um, the reason I came back, was that I wanted to participate in the collabo... in the, um, in the overhaul of the industry. Because, I think there is... there's going to be a weeding out of... of operators very, very soon. Um, and I think we're going to see a very... um, well, there's already a consolidation going on, but, but quite honestly, with all the different regulatory requirements that are coming up, um, the risk of a financial loss at a side, single-site operators are going to... are going to slowly find that it's harder and harder for them to operate profitably. Um, you know, larger operators, like Go Ape or Outdoor Adventures or EBL, they'll be able to take the hit from one site, either having a loss, or just as we have seen with the weather, um, you know, a loss might be the result of just, um, a terrible climactic experience, um, in that region of the country. So, people that are more diversified, um, will have a better chance of surviving that. So, you know, we've seen, um, up until last year, we'd only seen two sites that people were openly trying to sell. Right now, I know of, um, probably 7 or 8, um, owners that are trying to sell their operation. Um, so, it part will be catalytic to the consolidation, but, I, I

think the regulatory environment will be as significant. I mean, I bet, I bet you have 8 or 9, um, people in the last three months, ask me if I would manage their site for them.

M: Really?

B: Yeah. And the challenge is that, if their site is consistent... somewhat consistent with the operating and design practices of our courses, you know, that's probably a model that's reasonable. Um, the challenge is that the people that have built their own site, there's very... you know, like the guy I was telling about that's had this accident, they're sited so unlike any other site and it's so unreasonable to operate safely, that, um, the only thing I could do is tear down the course... and built it from scratch.

M: Wow!

B: And, whilst it's a reasonably good site, it's not good enough to justify the expense of starting a whole new operation out there.

M: Sure. I guess you have the culture aspect as well of taking over a new site. Because, um, they'll probably have different, um, um, the staff and so on will have to your staff and so on... so that has its own complications as well, doesn't it?

B: Well, you know, I... we... it's not that we don't hire people that are already certified or has industry experience, but I, we have not had good luck at retaining people that have previous experience and bringing them into our organisation. It's generally a lot cheaper to train people from scratch, even to rea... to get them up to a really high level, like a management level, than it is to go ahead and... um, rework somebody's habits, or viewpoints, um, that may be contrary to the, um, to the culture that you're building. You know, I may be a little bit more weary than some people, um, about change interventions like that, but I come from a background where my [intentionally left blank] is in [intentionally left blank] and a lot of my... a lot of what I did was traditional and in the traditionalists world was, you know, experience [inaudible] training and development and large organisational intervention that, um, often had to do with some, um, cultural change or mergers of two cultures. So, I, I know the potential challenges that arise. And, you know, ultimately, one of the biggest challenges in buying up these sites that are smaller, is that they're often mum and pop. They're in rural or semi-rural areas and what has made them successful is that they are a local. You know, we had that problem. We had a very serious problem in [intentionally left blank] when I first got there, in that I was not a local. And, it

doesn't matter if you've lived there your entire life, if you were not born in [intentionally left blank], you're not a local.

[Laughter]

B: and, you know, I was very lucky to retain somebody, um, who's my office manager now, but she came on as a bookkeeper that lives right down the road from the site. Um, you know, it's like seventh generation, um, in that area, um, and has been able to guide us through that. The same has been true in [intentionally left blank]. The partners that we have that are responsible for day-to-day operation, um, while one of them is from [intentionally left blank], um, the wife that was, that was running the site, you know, would come to the site in high heels and [inaudible] and it was just so not culturally accepted by... you know, even though she's certainly not wealthy in any way, she was seen to be this hoity toity... you know, progressive woman. You know, that was really scary to all the men around!

[Laughter]

B:... and, and it just didn't go over well. You know, we hired a, a guy that's family grew up there, his father was a pastor... you know, just a really good down-to-earth guy that, um, understands the local community and everybody wants to work for him, you know, because he's a local. And it's changed the business. And so, going in and buying up these sites is really hard, because what you really need to retain is... the manager that's there. And too often it's small mom and pops and the reason they want to sell is they want to get out. And, you know, you can't really do an evaluation that is to say, you know, we'll buy 51% now and you're going to keep in the same position you are and if you keep doing what you're doing, and the additional capital we'll pour in and the systems and everything, but when you sell this, your 50 or 49% will be worth what the entire tour was worth now in three years. And, that just doesn't really work for them, because what most mom and pop think is that their tour should be valued at a multiple that's probably like 7 times EBITA! When in reality it's probably worth 3. You know, I...

M: But, why are they wanting to sell in the first place, [intentionally left blank]? Why are they wanting to sell in the first place?

B: Well, I think when most people go in these tours, um, you know most people that have started these tours are generally people that have a number of years of professional experience, they own a farm... this is traditionally, not the newer players that, that are

coming out... but they owned a farm or they owned some property and they were really disgruntled about their professional life, they didn't like things that were going on, they didn't like working for other people and they had this incredible experience at another canopy tour, maybe in Costa Rica, and they would just have said: this is going to be a really easy business to run. And, the reality is, these are not easy businesses to run!

[Laughter]

B: Probably, first and foremost, they're weather based and they're totally unpredictably. Second, um, you know, the aerial parks less than the canopy tours, but they require a significant number of staff that are seasonal that always have to be trained, that when the season ends, unless you're in an area that's blessed to have a huge... you know, a huge university right there, most of these people rely on you to provide them for their, their livelihood and, and you know, and they expect that you're going to help them find work in the off-season and they get angry at you when sudd, suddenly you, you fulfil your word which said, you know, this was a seasonal position and, you know, they want to make it into something more. And so, it's a trying business, it's a difficult business, um, and you've got to be willing to put up with the ups and downs of it and, while, for a lot of these operators, you know, 10 years ago it was "build it and they will come" and you'll be grossly profitable, competition is coming into the market now and a lot of operators are making 50-60% what they used to make for a lot more effort.

M: Yeah. I can see that, um, and, well, your season is probably similar to [intentionally left blank], right? [Intentionally left blank] or so, is that your operating season?

B: Well, that's the summer season, yeah, and in the [intentionally left blank] summer we probably make 80% of our revenue.

M: Yeah. No, that's exactly what I thought. It is tough.

B: Now, we stay open year-round in [intentionally blank].

M: Oh? OK.

B: We're open all year with the canopy tour. But, the aerial adventure park... we just opened the aerial adventure park this past weekend, we usually don't open until mid-May, but the weather's been so exceptional, you know, it was 75 degrees, supposed to be 80 there today, um, we haven't had snow for a couple of weeks, and so, we opened up early, um, for that. And the aerial adventure park, what we call the treetops obstacle course, runs

through, usually the end of October, but, so, um, but mostly on weekends in Spring and Fall and then, for the [intentionally left blank] we're open 7 days a week. Um, with the canopy tours, we're, aside from some major holidays, like Christmas and Thanksgiving last year, although, I think that, that was the first time we were closed on Thanksgiving, we'll be open 364 out of the year.

M: Wow, OK.

B: Now, that doesn't mean people come 364 days of the year, but there is definitely in November, December, January, and February, where we don't open, because there's nobody booked. Um, but for the most part, we're open every day of the year.

M: Wow, that's incredible, because, given the climate in, um, [intentionally left blank], yeah.

[Laughter]

B: and versus our site in [intentionally left blank], um, opened up, um, the last, the last weekend in February we opened up and, you know, we're open 7 days a week for Spring break, which is generally down there, I think, mid-March to, til the second week in April, um, because it rotates for different schools. But, otherwise we're open, um, weekends in the spring and the fall and then from Memorial Day to Labor Day we're open 7 days a week.

M: Wow. Wow. Um, OK. So just, um, you mentioned before, um, that a lot of states, um, are... a lot more states are looking to regulate the industry, um, do you believe that the industry, working with public stakeholders on risk management, um, do you think that could work?

B: Um, do I think it will [inaudible]? I don't think it will reduce the number of accidents at all if that's what you're asking?

M: No? You don't think... it wouldn't have an impact as such? Combining the two?

B: No. I don't. I don't think there are any programmes that I have seen out there so far that will reduce the risk in any way to the general public.

M: Right. OK. Um, is it, is it just because of, um... Yeah, OK. Please... why do you think that, [intentionally left blank]?

B: Well, with the exception of shutting down a couple of shoddy operations, um, the reality is... states that choose to regulate themselves, generally don't have the type of qualified staff that can go out and actually make important decisions about it, so it's more of a rubberstamp process. Um, the states that are asking for a third party review, you know, and having an ACCT inspector or something, you know, um, may make a marginal improvement to, you know, where there might be a couple of sites that were getting by without having their inspection. But, the reality is, most sites to get insured are being required to go ahead and have, have inspection. So, um, you know, there's, um, unless the states become a lot more stringent and a lot more educated with what they're doing, um, I think it's a very poor strategy of protecting the public's interest.

M: Yeah.

B: Um, it just doesn't have a lot of bang for the value. And, you know, the state of [intentionally left blank], they decided to they wanted to hire their own inspectors initially, but it was going to cost the state of [intentionally left blank] a million dollars.

M: Oh, wow!

B: ... in wages and resources a year to do this. Um, and they were only going to inspect the commercial operators. Well, of the number of accidents that are occurring out there, only a... you know, only a fraction of that are commercial operators. Probably, when you look at the number of users that are going through commercial and you look at the number of accidents, the rate of incident is probably tremendously lower than the rate of incidences that's happening at schools and camps and non-profit organisations, um, that run an event and that... a lot of the states which, um, which would regulate this, um, you know, are initially looking at ASTM and trying to grow this into an amusement ride device and ASTM standards specifically precluded, in their scope, um, educational programmes. So, camps... it's not designed for camps even. And so, there, there are a number of challenges when it comes to mindful regulation. You know, some of the states have been more thoughtful than others, but, there's, um... there's... but, over, over, over-reachingly what I've seen is that, um, a lot of operators that are really poor that you would have expected to get weeded out once the state regulates, aren't getting weeded out they just... just get a stack of paperwork, throw in front of a regulator. The regulator doesn't know what they're looking at or what the prevailing practices are, or standards are and the guy rubber stamps them. And, now, somehow, they're validated in what they're doing, which I think, is more likely to lead to accidents than to prevent them.

M: So, so it sounds as though, um, one of the issues is you're seeing, is that when the regulator does step in, they're not doing it whole-heartedly. You know, they're not training their staff or anything in inspecting it?

B: I'm sorry, Marcus, you're breaking up again. I, I apologise.

M: No, that's alright.

B: Could you try that again?

M: Yeah, sure. I'm just... um, it sounds as though, what you're saying is that, um, that the main issue you're seeing is that the states that're trying to regulate they don't, don't do it whole-heartedly, they, um, they don't train their staff and so on... so essentially, they don't know what they're looking at and are just rubber stamping... yeah, signing at the bottom line basically.

B: Well, the reality is that there aren't enough qualified people in this market, in this market place right now to even what any of the states are proposing to do. I mean... I mean, the, the professional vendors that are out there are struggling like crazy right now to keep up with inspections and training. It's, you know, the challenge is that it's a boom or bust market and everybody wants to have their inspections and training done right before they open. Nobody wants to, you know, nobody wants to go ahead and have their training done in February and hire people and then not have them really work until May. Um, that's a recipe, that's a recipe for, um, for a wasted investment. And so, so, you know... and it's hard, like, you know, the state of [intentionally left blank] we just submitted for our permit and she said "we need an arborist report" and I said "well, the leaves aren't out on the trees... an arborist report at this point would be absolutely worthless".

M: Yeah!

B: I mean I could do it... I can do an arborist report for you, but we're missing a critical piece of information about the health and the wellbeing of the trees, which is the foliage and until the foliage is out, you know, it doesn't make any sense and so, we have to go on the structural integrity of the trees as they were last year and then our current findings. But, to make me spend 3 or 4 thousand dollars to go ahead and have an arborist say "well, this is my best guess, let me come back in two months and I'll give you a really thorough report". So, I mean... the challenge is, most states, most states try to do this with the best of intention. Um, some states are better at listening to the market than others. Um, but, you know, some of these are... some of these states are also, um, at the mercy of the budget

that they're working under and a lot of times what happens is that, you know, there's an accident and politicians go ahead to protect, to protect their public image, go ahead and mandate that regulation needs to come, um, yet they don't look at how we're going to fund this over time. You know, the state of Hawaii, some years ago, they, they put through legislation that said we're going to regulate the zipline industry and we're going to have inspectors and we're going to do this. Well, in Hawaii, I mean, you have all these little islands. So, they're going to have to fly these inspectors all over and they're going to have vehicles that they rent, they're going to have to train these people, they're going to have to do all this. And they said... then they said: "to be reasonable we're going to have to charge \$250 per operator". Well, these operators are like "wohoo, this is the greatest thing", right? To most of them, by the time they're flying somebody over from the mainland and doing a thorough inspection, we're talking 5-7 thousand dollars per year!

M: Oh, wow!

[Laughter]

B: And the state was going to end up losing millions of dollars per year. And the reality is the inspection would probably have been a lot worse. You know, the guy that I was just talking about, that had that accident with the unbelievably bad zipline, had... they were the first zipline tour to be inspected in their state... to be regulated in that state. When they were built, there were no other large commercial tours in that state. They called the state and said, you know, "what do you want from us" and they said, you know, "we're going to regulate you as an amusement park and carnival ride" and they sent out, after the course was built, a group, I can't remember how many it was, 5 or 8, um, ride inspectors, they came out, and unanimously they approved the site. Well, the... what you need to be an amusement park ride, requires that you have stamped engineered drawings. They actually had typicals, that they had accepted, which weren't even for, typicals for this site.

M: Oh. Wow.

B: I mean, the guys didn't even know how to read engineering plans, let alone, how to go ahead and test this to the prevailing, um, practices and standards, which would have been, on each of the ziplines, to take a 250pounds, well, it was 260, 275pounds initially, um, bag of weight, or dummy, and send it down this line and see what happens. And, at 275pounds, to brake somebody in the distance that you could if the primary handbrake wasn't, you know, somebody failed to brake or was unconscious or for whatever reason didn't brake,

um, to brake them with a backup emergency brake, would've generated somewhere between 6500, 7200 pounds force...

M: Flippin' heck!

B: ... which is well in excess of the rating of the trolley and the carabiner and that and the lanyards and harness... um, not to mention what it would have done to the human body. I mean, OSHA, OSHA requires that if you're in a harness, that the impact don't exceed 900 pounds force and here we're talking about something that's 8 times that and none of these inspectors saw that, but because this thing was permitted by the state year after year, kept getting stamps, the owner thought he was doing everything right. You know, so I think, ultimately, regulation in this industry, the way that it's going right now, it's going to backfire. Um, you know, and that, and it's something that's partly the fault of some of the standards associations, PRCA in general. You know, they, they've kind of come... they came to the table in [intentionally left blank] a couple of weeks ago at a meeting and said "if these guys were meeting PRCA standards, there wouldn't have been an accident". Well, I just go finished defending the president of PRCA on a course where he had a near fatality... and whilst they didn't find that he, he was in any way violated any of the standards, or the PRCA standards at the time the course was constructed, the reality is even a good... even if you go ahead and adhere to the standards and make a really good faith effort, most of these accidents happen because of human error, and, and, basically because there's just inherent risk in sending somebody hurling down a... a taught cable through an, an organic forest at high speeds and stopping before they hit a termination. I mean, it's... you know... and so, the reality is, you know, even if the people meet the standard all it does is reduce the, the potential for an accident. It doesn't actually completely eliminate it. And for some reason, some of the regulators think "well, we need a standard that eliminates. We can't have accidents". And I... I have a hard time, um, I've had a hard time justifying that. I mean, think of the... the number of people that die every year on highways. I mean we get people licensed at the age of 16 to, to go ahead and do something that is inherently risky and have control of their speed and direction of travel, how they [inaudible] with other vehicles. Um, and as a result, we have foreseeable accidents. And yet, what we're saying is that an adventure... and somehow adventure is, um, um, a [inaudible] less valued culturally that, that driving a car to work, or driving a car on a trip, is somehow more, um, more valuable to society and so the willingness that we have for people to be killed or hurt is more acceptable than it is... than that of the value of adventure and the importance to people learning how to actively assess risk and that, that is an accident there can't be tolerated.

You know, that to me, as somebody who is really passionate about adventure and about education, it's just really, really difficult to take, because there has to be some tolerance of risk, because of there some acceptance of risk there really wouldn't be any value or reward in, in the pursuit of it.

M: I mean, yeah that's true. That's why it's called, um, adventure parks, right? I mean, the word is in adventure isn't it? Yeah if you take the risk out adventure...

B: Well, and that's...

M: Yeah... go ahead, sorry.

B: Yeah, that was... that was my point in this case that we just brought on the stand when I got called in and was... you know, they're examining me, and I said "well, you know, the person that got injured here had a masters degree, she was a highly educated person, she was a teacher, she was a track star and a runner. I mean, this was a person that accepted risk in her life on a daily basis running and trail running and competing, is somebody that was educated enough to read at a high level that read the waiver, says she read the waiver and, and on top of that the name of the tour included the word "adventure", which means a dangerous or risky undertaking with unknown outcomes.

M: Yeah!

B: I mean, I hate to say it, but she got what she bought.

M: Yeah.

B: You know, it's certainly not the outcome that, that we intended but it is a possible outcome that she was warned about and she got an adventure. I mean, good adventure, bad adventure, call it what you want, but it was a risky undertaking with unknown consequences. The consequences for her, unfortunately, happened to be... you know, she didn't control her speed and she, you know, shattered her heel and, you know, she's going to be in rehab for a number of months and, and suffer the consequence of that. But, you know, I mean, it, you know, it's a difficult thing. I mean, honestly, I don't think there's anybody in the industry that would say they got in to business to injure anybody!

M: Obviously. Yeah!

[Laughter]

B: That's not something that any of us think about, but I think those people that have been in the industry long enough are smart enough to know it's a numbers game. You know...

M: Yeah.

B: You know, and, there are a number of people after the fatality with Jim Legitt and with Ropes Courses Incorporated and also with Navitat and the strangulation, um, that, that really went after those guys and said "you did this, you did...". Well, these are two of the top operators in the world! Not in, not in the United States, but in the entire world. And they put through, in Jim's case, millions upon millions of people, in Navitat's case, probably hundreds, hundreds of thousand a year, and the reality is, it was just a matter of time before something happened and you can only play this game so long. And, the fact that it happened at Navitat on the fourth day they were open on a new tour... you know...

M: Yeah, I read about that one, yeah.

B: ... that, that's painful and you know, I feel for Dylan and Ken and all these people that experienced... for the family, and you know, their loss... but, you know, it's something that I think of very... every time I take my own kids on my own course. Every time I, I, you know, my kids ask me stories about, you know, my mountaineering background, I think, you know, do I really want my kids to be mountaineers?

M: Sure. Yeah.

B: You know, it's a hard question, you know. I don't want to... I don't want to experience the loss of my... my children or them being hurt, but at the same time I do want them to live their lives adventurously and I do want them to take risk and be proud of their accomplishments and I don't know of a better way to get to that outcome, than to do adventures.

M: Yeah. I think...

B: I'd certainly feel better about them going on an adventure park than I'd do about them going to war!

[Laughter]

M: Yeah!

B: My God. I could justify it that way. But, you know, it's a tough situation to think about. Um...

M: Um, so, if, um, I guess, if, do, the states obviously... [intentionally left blank] doesn't regulate, um, in [intentionally left blank] it sounds like they do a little bit, um, do they, do they collaborate at all with the industry or, um, have they just stepped in and said "this is how it's going to be" or...?

B: I'm sorry. I missed that a little. The end of that, where you said "do they... something"?

M: Sure. Do they, um, collaborate at all? Um, [intentionally left blank] as a state, do they collaborate at all with the industry or have they just said these are the rules?

B: Marcus, I apologise. You're going in and out for some reason. I'm not sure that... I have excellent cell reception here, so I don't know what the challenge is... but if you could try that again.

M: Yeah, sure. Sure. It's OK.

B: Oh, you're clear now!

[Laughter]

M: OK. Um, yes, the question is: whether, in the states that you have worked in, do they collaborate at all or have they simply said: these are the rules and you need to follow them? Do they try to work with the industry to implement these rules?

B: Well, I think there have been groups of people in each of the states that are, you know, members of ACCT or PRCA or just stakeholders that have worked to try to educate states and whether states have listened to what other states are doing, I can't honestly tell you, other than it has brought to our attention that there are other states doing that. Um, the state of North Carolina just put out a report a couple of months ago, um, which was the most comprehensive report I have seen done by any state, um, that basically found that there are inherent risk in these activities and to the participants in the activities and that they don't believe that the industry should be regulated and that it's, um, that it's... you know, there might be some guidelines that states should adopt to go ahead and set minimum standards and expectations, but that they don't believe regulating would produce a, a more desirable outcome and, um, you know, I thought that was, um, a really interesting finding. But, more importantly I would, I would really commend the state for putting that work in, regardless of what the outcome had been. Um, the fact that they, um, paid for and retained the staff to put forth such a quality report, was an important... now the challenge with a lot of these states, um, like the state of Colorado, for example,

regulates the ziplines under the department of boiler makers and elevated devices. I mean...

[Laughter]

B: You know, and that's true for [intentionally left blank] as well, you know. And sometimes they fall under the department of workforce and labour and it's, it's so inconsistent from state to state that the, um, you know, the background of the people that are trying to regulate this, um... just varies significantly. In the state of New York right now, there's a big battle, um, between the department of labour and human services and, ironically, it's the department of human services which would regulate ziplines and camps and non-profit schools, is seeking for the, for those operators to, to adhere to ASTM, which, in the [inaudible] sense that they don't cover those applications, and the department of labour, which regulates commercial tours, is saying: we're fine with you working to ACCT. And so, ironically the commercial market has a more open and lower standard and expectation than the non-profit schools and traditional use, which has a much higher standard, which in the scope, particularly said that it's not relevant to them. So, you know, there's power plays and there's purposes behind regulation and I think... you know, the same thing is true for writing standards... you know, I... I was warned by an expert that ACCT hired a long time ago that there's really only two reasons that anybody writes standards: one is that they're scared, um, two is because they want to make money. And, you gotta determine why it is that people are writing the standard. Are they looking to make money and profit off of it or are they scared, and that's scared of a loss to their business, a loss to the market, um, and you gotta understand what that is, and, I'm still not necessarily sure I know the intentions of some of the organisations... writing standards right now. Um...

M: OK. Do you... do you think that's the... with it being... because it's different states of course, so would it be if it was on a federal level or...?

B: I apologise, Marcus, it broke again.

M: Oh, I am so sorry, [intentionally left blank].

B: It's OK.

M: Do you think it would be better on a federal level rather than a state level then?

B: Sure. I definitely do, but I... that'll never happen.

[Laughter]

M: OK.

B: It just won't happen. Um, I... the, you know, it hasn't happened for amusement park devices. It hasn't happened for tramways. Um, it's, it's not regulated for elevated devices, like elevators, um, you know, the fact that the ski industry was able to get a national standard is only because they killed so many thousand people, um, and that it would... it came about at a time, um, before these states really started regulating it and, um, at a time where we didn't have a lot of regulation in this country. So, um, you know, it just came about that way. But, now that the states have started regulating it individually, I mean people keep asking for it, they're criticising ACCT, they're criticising the industry, um, it's, you know, it's just not practical. It's not going to happen. Um, it's rights are too important to the states, too many states have precedent with amusement park devices and other type rides and attractions, um, at a state level to ever think that we would have a federal... standard.

M: OK. So, um, the, the most realistic, and effective option, um, from what I can understand then, would be then, um, to leave the public stakeholder out of it then and, um, have the industry solve its own issues, if you like?

B: Well, I mean to some degree we are in that process. I mean, we...

M: Yeah.

B: ... um, we have ASTM that's out there now and it's well recognised by regulators, um, we have both the ANSI-ACCT standard and the ANSI-PRCA standard, um, and ANSI is very, um, well-accepted by regulators, so, in getting those types of credentials in the last, in the last year or so, that's been really important to the market place. Um, because, it provides a, um, a reliability and credibility to the standard for regulators that wasn't previously there. Now, what we need to do, um in the market place, to further make that standard credible and to validate that, is to create a certification, set of certifications that go beyond just inspectors, so we have inspector certifications, we have trainer certifications, we have operational reviewer certifications at different levels that people can be qualified to because that's what regulators buy in to. Regulators want to see what, what makes somebody a qualified person and then show me the drawings. I want to see the drawings. And, you know, that part will allow us to be more uniformly regulated, you know, state-by-state. But, still at that level you're going to have a ton of variation. I mean, most states that are larger, um, run their own OSHA program.

M: OK.

B: You know, like California, it doesn't go by just national OSHA they have Cal-OSHA.

[Intentionally left blank]... like, you know, each state looks at their workplace issues based on the cases of precedent that are set in their own courts and the concerns that they're seeing. Um... so, yeah, the idea, the idea that we would ever have some... I mean we have a nationally recognised standard. I... we have multiple nationally recognised standards. That we'd ever have some kind of federally adopted regulation, to me, just seems... I mean, you'd have to have, like, some president's daughter go on a zipline and get hurt!

[Laughter]

M: Yeah!

B: ... or the speaker of the house's daughter... that's, that's the only way that I could conceivably ever see that something like this happen. An important politician would have been killed or have family member injured and for, you know, it to happen.

M: OK. Yeah. Um, yeah, I know that makes sense. Um, and from the reading that I have done, it seems as though, um, the federal option is out of the question completely as well... just because of the size of the country in general anyway. Um, but, um, so, do you think that the public stakeholders simply enforcing these standards, do you think that that would work, if they basically just took the ACCT standards and said "this is what we're going" ... Do you think that would make a difference?

B: Well, enforcement of... enforcement of standards doesn't reduce risk. Education reduces risk. Right? Um, the reality of enforcing this operational review... um, most people, like I said, have done a pretty good job of having their courses inspected to the technical aspects of the structure. But, I've, I created a uniform tool that basically made about a 100 statements and those statements were tied to one or more standards and if you could validate that standard as true then you could [inaudible] that standard and if you couldn't validate it as true, then you were deficient in some standards. And even the best operations that I went to were scoring about 50-60%.

M: Wow. OK. Yeah.

B: ... and it's not that most people are not running really good programs. I think there are tonnes of operations out there running exceptional programmes. What most operations lack is in the documentation of what they're doing. Probably, the operating practices at all

these standards, both the PRCA and ACCT standard, are exceptionally difficult to meet, especially when you look at some of them that are really vague. Like: “the organisation is operating, um, ethically” to, you know, or, you know, “... is marketing itself accurately”. Well, what does it mean for, you know, what do those things really mean? Or, what does it mean that the organisation will have in place a risk management plan that helps them to identify and mitigate risk? I mean, what does that physically look like when you get to a site, in terms of documentation and the procedures... um, I mean, what is an effective risk management system? I mean, can we define, like, you know... does it mean that I have to have somebody of a certain qualification on staff? Does it mean that, um, I have to have an operational review by a third party annually or, right now it’s every 5 years according to ACCT standards, um, which nobody does. Um, but, what really is that? And I think, um, we’ve had, I think, first standards were published in 1994 for ACCT, so, you know, we’ve had time to kind of perfect our, our technical standard and there’s some steps that we’ve made that weren’t productive and we’ve removed them, um, standards... subsequent standards. But, we haven’t had a lot of, of experience vetting our operations standards and, you know, one of the chief complaints among, among our professional members, and among our operators that are members of ACCT, is: “listen, I’ve had this company come out and inspect one year and I had another come out and inspect me this year and this inspector told me that I failed because of this and the next inspector said, well that’s completely fine, that’s not a problem” and “we’re frustrated of the inconsistency of how the people apply the standard”. Um, and while I think there is some discrepancy from what that looks like, the technical aspect, my guess is that when the operational review comes out, wow, that’s going to be across the board crazy. And so, all we need to do is provide much better content and educational opportunities for staff and say “let’s spend two or three days with inspectors for them to get certification, like, every year, and they renew every year, that has real educational content, that says, you know, let’s create all this opportunities, let’s go to a brake-test lab and put forces together at a brake-test lab and show those people: this is what really happens when you fatigue an eye-bolt. Or, you know, when cables are attached this way, this is what fails. And, you know, this is why we wrote this standard like this, so you understand it what you’re looking at, what might be an obscure application. Um, and the same is true for operational reviews. We need to be able to say that, um, for a risk management plan to be legitimate it has to have the following ten components and if it doesn’t, here’s a template that as a certified operations reviewer you can use and help your client work through to understand the importance but also

understand what are the steps that they need to take to have this plan. I mean, because, right now... the fact is, and I'll go back to the accident that we just talked about, this was built by somebody that was insured as a professional, claimed to have all this experience, like active in PRCA standards, didn't, but claimed to, um, the course was inspected by the state, by, by more than a few ride inspectors, it was reviewed by one of the most reputable inspecting PVMs that ACCT, ACCT PVMs that there is and passed. Um, I would never have passed it. I went out there and the first thing when I looked at the line, I said was, you know, we'll go down it with a handbrake, but, we're coming right back and we're taking some weights and we're throwing some weights down this thing and seeing what happened and the weight came down at about 145pounds, the weight hit me so forcefully, I mean it threw almost 15 feet... I was lucky it didn't rip my arm right off!

M: Oh. Flippin' heck! Yeah.

B: Um, and, and, and the reality is that we have a standard that says that, that the braking system must be tested to their extremities. Um, and so, in that case, they had changed the max weight limit to 250lbs, so each of the systems should have been tested to 250lbs. Now, what happened is, and, you know, I don't necessarily fault the inspector for this, but they use a hand braking device that can be really aggressive, like, I mean, it does take a lot of force, it's called a Brake Hawk, and under dry conditions you could go down and brake with at 250lbs and unless, you know, you're a really lethargic 250lbs that's totally out of shape, it wouldn't have taken much force to pull down on that brake to slow you down and have you coming in at almost nothing. And so, I'm sure what happened is that the inspector rode that one and was like: "oh, well that wasn't all that fast. It was really easy for me to brake". But, the, the challenge with that standard... and it's hard even like what I did, would've been really hard. One, I didn't think it was safe to put 250lbs on after I tested 145, um, but even if I had done that that day, it was very cold, it was about, you know, well below freezing that day, but it wasn't particularly windy, um, and had I tested the 250lbs and maybe passed it, did I really test it to its extremes? Maybe, or maybe not. Probably, the extreme in that condition, would be a tail-wind, just below, the, the, the reasonable operational standard of the course of 30 or 40mph, or whatever they deem it, while it was raining freezing rain. Right? That probably would have been the extreme of the system. So, now I failed it, so I didn't have to test it any...

Recording ended unexpectedly.

Recording restarted.

B:... but they were sent to them in an envelope by an engineer. There are certain... there are certain exceptions that, um, as an ACCT certified inspector that I can make if something has been engineered and stamped by a licensed engineer. So, you know, the other question that I have in my mind: are there decisions that were made by these ride, state ride inspectors and by this certified ACCT inspector, based on the assumption that they were told, and in earnest they were told by the operator the course had been engineered by a licensed engineer, when in fact it hadn't, but the operator didn't know that.

M: Yeah. I'm amazed that course passed. I'm really amazed that course passed it's, um, inspection as such, because by the sounds of it, yeah, it just should never, ever have happened.

B: There... you know, some of these accidents that occur are fairly [inaudible]. Um, there's an accident... I may be doing an accident investigation for... it happened some time ago, but [inaudible] may go do it, um, where a, um, guide failed to clear the corridor, or to make sure the corridor was clear, and they had previously sent a, I think it was a father and... and his daughter, since his daughter only weighed like 70lbs, and for some reason, the way they set it up, the father made it in, but the daughter, daughter was not tethered to him and didn't make it in, and so the guide went out on the cable to retrieve this girl, but as he's pulling her back in, suddenly, um, somebody else is coming down the cable.

M: Oh, no! Oh.

B:... and is able to pull this girl in quickly and, but doesn't have the time to get off the cable, clips her to the father and just unhooks her and throws her off the line and the mother comes down, and because the guide is still hanging on the cable her shin impacts the front edge of platform because the cable is [inaudible] so much lower and spins around and slams into the guide and then into the tree.

M: Oh!

B:[...] and is severely injured. And the defence from this, this party that they're asking me to defend them is that, well the reason she wasn't able to brake is between the time she started zipping and she hit the bottom, it started raining.

M: OK?

B: That's just not plausible in anyway, right? The cause for the injury is that the cable was deflected further because the guide was still waiting and because the descender guide failed to clear the corridor properly and wait for the "all clear".

M: Right! Right.

B: ... and it was... it was part of their procedures to do that. Um, whether the guide had heard or, whatever happened, it was human error and a failure to follow operating procedures, um, and negligence of the staff that caused the... this incidence. Rain or no rain... that had little to no causal effect on the severity of, of the injury sustained.

M: Yeah, exactly!

B: And so... but I think, this is the situation, when a lot of these people do have a third party inspection a year, um, they don't ever come to the ACCT conference, they think they [inaudible] every ACCT standard that there is. You know, and I have always found it very concerning, um, people that talk about being trustworthy or, talk about how safe their course is generally do so, because... because they know it'd be better not to!

[Laughter]

B: Or, or they have a reason to try to please people and to believe something they're not. But, but, yeah, you know, it's... it's an interesting market right now, where there's a lot of great operators and there's a lot of [inaudible] operators and, unfortunately there's still quite a number of people that... um, could benefit dramatically from being more active in the greater community and take the advantage of the opportunities and the resources that are available had they, um, participated more.

M: Yeah. Yeah. I mean it's a great activity and, um, it's just a shame that it's, um, you know, because it only takes a few people to, to, um, to ruin the reputation doesn't it.

B: Well and even that said though. I don't know... did you see the report that came out of the University of Cleveland earlier this year about the number of accidents on ziplines rising?

M: I did, yes. Um, Billock et al., 2015...

B: Yeah. And, you know, [intentionally left blank]. When you really start examining, um, to some degree anecdotally, the number of accidents and incidents that are occurring, but based on the statistics that I have done... that I have right now extrapolated the number of accidents, the reality, I think, you know, people were shocked by that and will be even

more shocked to find the true number of accidents occurring by year, but probably would be even more surprised to find the number of people participating. And, in the United States and Canada, last year, more than 10 million people participated in ziplines.

M: Wow! 10 million?!

B: I mean, and so you start thinking about, and extrapolating out... you know, what does that mean based on the number of zip descents that a course has, whether it's aerial adventure parks or zipline or a ride and, you know, you start looking at, how many times do guides have to go on top of this, right? Because, the average tour has somewhere between 6.5 and 8.5 riders usually for two guides on canopy tours, um, and training and all this... and you start adding up and I, I would have to look at my numbers, to look at this again, but you start getting to the point where there is probably likely, like, 70 million zip descents in the United States and Canada last year...

M: Wow. Yeah.

B: and of that, the consequence, um, for, for fatalities was probably, like maybe for commercial and professionally built courses, maybe like 8. You know, um, you know, um, and that's the average tour that does ten thousand people a year, probably between labour, labour and participants, somewhere between 1.5 and 2.5 accidents per year that require, per ten thousand, that require immediate medical attention of some sort, whether it's... you know, year we had a guy that was going out to build an element and we had a, um, a steel set of adjustable steel... um, steel saw horses, and they slipped out of his hands and when he went to grab it his fingertip got cut off, because [inaudible] had opened on it.

M: Ohhh.

B: Like, I mean, it had nothing to do with ziplining, but he was building it. You know, it would be hard to get, hard to figure out what those are, but, um, you know, that, that, that study so poorly done, and it really is hard to give any credibility to it, other than they are correct. The number of ziplines are, the number of zipline accidents are significantly on the rise, but, you know, last year, if you were to include the number of backyard ziplines, I bet you twenty-five million within the United States participated in backyard ziplines. If you, if you, if you include what they're including in there called a rail-ride, or the ziplines that are kind of, you know, track rides that are... on a kids playground. I mean, now you're talking probably 40% of all of the playgrounds in the United States, so you'll have to look at what percentage of elementary school children may have participated... you know, I mean, it's

just become so [inaudible]. But, you know, the fact that they found that 40% of accidents have happened to children 9 and younger, well, very few commercial operators allow children under the age of 9. The average age of most commercial operations is 10 and greater. I mean, clearly the accidents are on the rise, but I think in general, as an industry, you know, we're doing a really good job mitigating those risks.

M: Yeah. I think, you know, I looked at that article as well, you know, and it's easy to find the holes in it, but it's great that there's finally some academic research out on it, the industry, but it, it's easy to find holes in their, in their research. But, yeah. Listen, [intentionally left blank], that's all I've got! You've answered all my questions and more, yeah this has been fantastic. Yeah thank you very much.

Call ended due to connection issues.

Call resumed.

B: Hi, Marcus. Sorry about that! Went through a [inaudible].

M: No, that's alright. It's alright. I was just saying, basically, that, um, that's it. Yeah, you've answered all my questions and more. I don't have anything else to ask you very, very much! I think we've spoken for about three hours!

[Laughter]

M: [Intentionally left blank]. Thank you again. Thank you, [intentionally left blank].

B: Marcus, I apologise, I am losing you again. If you can you hear me OK, I just want to thank you for the work you're doing. This is really... I think it's much needed work!

M: Thank you [intentionally left blank]. I can't thank you enough for taking the time for this. Well, take care of yourself, [intentionally left blank] and, um, I'll send a copy of the recording off to you as well.

B: That sounds great. I appreciate it. Thank you very much, Marcus.

Call ended

Participant 4 Conversation

M: Me B: Participant

B: Hi, this is [intentionally left blank].

M: Hi, [intentionally left blank], it's Marcus Hansen. How are you?

B: I'm good. Who is this? Marcus?

M: Yes, Marcus...

B: Hi, Marcus. How are you?

M: I'm good. I'm good thank you. Um... is this a good time to talk?

B: Yeah, this works. I apologise for not answering the call earlier, my phone has been doing weird things. I tried to answer and, um, didn't pick up in time and then it was an unknown number, so I couldn't call you back.

M: No, no. That's alright. I think it's because I'm calling over Skype. Um...

B: Oh, do you... is Skype easier for you? I can set Skype up on my computer, I mean it's already up, I can give you my Skype name.

M: Um, it's entirely up to you. I mean, it doesn't really cost anything to call over Skype to a cell phone, so...

B: Oh, OK. No, then if we're doing this, we might as well stick to this, right?

M: Yeah. OK. Great. So, um, well, thank you very much for taking the time out of your busy schedule for, um, for this study, anyway. Um, basically, um, the layout of the interview, we'll start with some general basic questions, and then some, um, questions on risk management and then some, finally, some questions on collaboration.

B: OK.

M: Um, and obviously, like I said in the email, it's all confidential as well, so even, like if you mention your company name, um, I'll just edit that out when I transcribe the interview.

B: OK.

M: OK. So, um, do you have any questions before we start?

B: Um, no.

M: OK. OK. So, um, please tell me about your role within the organisation.

B: So, I am the director of training and operations for... the company.

M: OK. And how...

B: Um...

M: Sorry, go ahead.

B: No, that's it.

M: OK. Yep. And how long have you been in the aerial adventure industry, [intentionally left blank].

B: I started in the camping industry when I was 17, um, and that was 21 years ago and I became full-time in the adventure part of the industry in... 2005, which was 11 years ago.

M: Wow, OK. OK. So, um, and you build and design, or design and build parks, right?

B: Yes. The company is [intentionally left blank]... or I'm just going to have to say [intentionally left blank] and you're going to have to edit it, but, um, [intentionally left blank] is a full-service vendor and so our company does everything from initial site visits and design and layouts and creating the product, to, um, to working with fabricators to, um, create pieces and then, obviously, we do the installation of it, we have an entire training department and we have an operations department, so we can either support new operations or we can... take and actually operate. Some of our clients actually operate their courses and they just pay us to be their staff. And then we have an inspections team, a maintenance team. We have a sub-category called retro-fit, where, if somebody had a course that was built either by us or by someone else, and they wanted it to be modified in some way, we can go out and modify it. Um, so that's... we sort of do everything that the industry needs.

M: Yeah. Wow. Um, yeah, that's quite a lot! Um, and, so, do you build, um, both commercial and educational courses?

B: Um, we, yes. Um, we definitely have and we will continue to. Our primary focus is in the commercial industry. One, because we're good at it and we get a lot of business, and people ask for us to do it, and, um, two, because, since we started doing commercial courses, they require a larger staff, usually to build and once you have that staff, to

maintain that staff, you need to continue to find projects that they can do, so we continue to seek out a lot of commercial work. But, we do have a few contracts a year with smaller, more education-based programs.

M: OK. Yeah, that makes sense, yeah. Do you... is it... do you find that it's a growing industry? Overall...

B: Yes. We have been growing continuously, um... we sort of look at 2009 as, sort of, when the growth really kicked in and it's been growing ever since.

M: Oh, fantastic. Um, and so, um, what do you feel, find is the key attraction to this... um, activity? Um, from a customer point-of-view.

B: Um, well our customers are the operators. So, for them there's a lot of money to be made in it and I think the reason they see a lot of money to be made is because the public is looking for opportunities to spend time in the outdoors and have these unique memories and experiences, these sort of, you know, once-in-a-life-time moments and these thrill-based activities give them that. Um, additionally, I think that there is a perception of safety for a lot of the general public, and so, they don't have to have prior experience or prior skill or any prior equipment and they can trust the industry to keep them safe and so they can come and do this with their families, versus maybe going into the outdoors themselves and having to be responsible for their own safety. And then, I think, some aspect of it is that it, um, has sort of definitive times and so people can say: "oh, I want to do something for 2 hours with my family" and they can, you know, pay money to have this incredible experience for a couple set hours.

M: OK. And how, um... the thrill-seeking aspect of it, how, um, what role do you think that plays in the overall attraction? Do you, um... of the activity, do you think that's one of the main attractions to it or...?

B: Yes. I think that the excitement is absolutely one of the biggest reasons that, um, people come and I think also that it is something unique that they, that they have to go, sort of, pay to do. I mean, most people don't have a, like a 70ft tower that they can just jump off of, or, you know, a mile-long zipline that they can ride, and so, it's this, this experience... it's kind of like "oh, wow, I can pay to take a cruise. I don't own my own boat, but I can take it on a boat. I... um, I don't have this, you know, other way to get it" and so, they have to pay to do it and so it's a money maker for anyone that has one.

M: Fantastic. OK. OK. Um, so, moving on to risk management, how do you define risk?

B: So... we, we sort of look at inherent risk as, sort of, the basis, and then there's the perceived risk beyond that. And so, for us, perceived risk is people have this sense of excitement or fear or nervousness, but it's all in their head. In reality, there isn't really the potential for a problem on the level they think, right? So, when they jump off the, a 70ft building, I have this instinctual, bred in to me, sort of fear about what happens when I release myself off of a building. The reality is, the system is probably going to be doing its job and you're going to be OK. On the flip-side, we look at inherent risks and that is the things that exists, um, with that, if you were to eliminate would change the activity or render it not same thing. So, ziplining is exciting and feels risky, because it's being done at height and at speed. And so, I could build you a zipline on the ground that is 10ft long and goes 2mph, but that wouldn't be as fun.

M: Sure.

B: So, people are willing to accept this inherent risk, but they, sort of, understand that, like, there is a reason it's fun or thrilling. It's because I've put it at height and at speed. The challenge that we find is that people then... you know, in certain countries like America, people are very responsibility averse and so they don't necessarily want to take responsibility for their own safety and so they just assume that it's "safe" and we don't think of these activities as safe, we think of them as risk managed. So, being at height is a risk, right? Gravity is always on, you could always fall and so, we manage around those risks of falling, but, that doesn't necessarily mean that every single person isn't going to fall. So, I think that's sort of how we look at it...

M: OK.

B: Was that an effective answer for you?

M: Oh, yeah. It's going really well, so far! Yeah. It's really good, [intentionally left blank].

B: OK. Good.

M: Thank you. Um, what do you think are the key challenges? I mean, I think you just touched on it a little bit, but, um, um, what are the key challenges you face in risk management?

B: Um, I think that participant involvement is one of the biggest things that we're currently dealing with, where in the past, companies, regulators, clients were willing to have participant involvement be part of the inherent experience... so it was part of the thrill and

the fun, was being involved and, you know, maybe having to slow yourself down or participate actively in some way. I mean, it's a challenge, because, if you, if you have a human element, it's hard to manage that risk, because you can't control people's every move and every behaviour and so, creating, um, environments that people could be involved, but not necessarily have the opportunity to hurt themselves is, is a challenge and the biggest challenge now is, because, people have hurt themselves, being involved, the industry is becoming more, um, more risk averse and saying: "you know what? We don't really want participant involvement. We want them to still have fun, but we don't necessarily want them to have choices. So, it's turning more into, like, um, a passive experience, more of like a rollercoaster-situation. Um, or, even if they're active, they're so protected, you know, it's more like a playground where they're just so, so protected. Um, so that's one risk that we're dealing with. The other one is guide input, is also another human factor. And so, um, managing staff, base-level staff, that are responsible for safety. How do you create... or, how do you create an environment and/or create a staff person that will manage risk effectively is another challenge that we deal with regularly.

M: OK.

B: And then, of course, designing... designing rides and activities, as people want to things to get faster and higher and longer and crazier... then there is more inherent risk and so, building these bigger, faster, more fun systems, also requires you to somehow then manage those risks and that's a challenge when the industry is growing faster, sometimes, than the technology. And so, [intentionally left blank], I guess I didn't say this upfront, but, so [intentionally left blank] is a manufacturer as well. So, some companies will just buy trollies or just buy helmets or just buy harnesses, but we've actually designed our own trollies, we designed our own braking systems, we've designed our own emergency braking systems, we've partnered with companies to custom-design and manufacture harnesses and custom-manufacture trollies and lanyards, because it's the only way to meet the needs of the industry where other things have not been developed. And we do sell our products, not only to ourselves, but we sell them to our, even our direct competitors, because they work so well.

M: Oh wow. Wow, so you really offer the whole package, don't you? Um, wow.

B: We try.

[Laughter]

M: Yeah. You try.

B: I mean, we always say that, you know, if someone asks us, we always say: “yeah, we can do it, we just have to figure out how much it’s going to cost and how long it’s going to take”.

[Laughter]

B: Some, some, some manufacturers... some of our competitors are really great and they have a set product and that’s the only thing they build and so they say: “you can pick from this, you know, this, this catalogue of activities and that’s what we’re going to build for you”. And the, the benefit for them, from a risk management perspective, is that they’re well-vetted. We, sort of, jump out on a limb and say “we’ll build this thing that’s never been built before and we’ll figure out how to design it and install it”. Um, but that does mean that we are often having to, like, go in and fix it or, you know, just, sort of, figure out what’s going well or not in the moment.

M: Do, do you find a lot of the, um, builders and designers are going for the, um, cootie, cookie cutter approach as well then? Um, to kind of eli, eliminate some of the, um, or to make it easier, I guess?

B: I think so. Um, I think there’re a lot of people, a lot of companies doing that. Or, if they’re not using something that’s predesigned, you know, they’re not using a cookie-cutter approach, then they’re building a lot smaller. Like, they’re building these custom things, but they’re kind of small and, and they’re not advertising it as much, because if you advertise that you have this custom thing, then you expose yourself to, um, you know, risks of, of how are you meeting the standards, or how are you being compliant with the industry? And so, you can make a cust... if a summer camp wants you to add some funny thing, no one might notice, but if you put that on top of a, a, a major ski resort, everyone’s going to see it, so you have to just be more careful and, um, you know, who sees it and who has access to it.

M: Right. Yeah. I mean, it’s just what I’ve been seeing myself, you know, um, in the industry. Like you said, that, you know, they have set things that they do and they only do it this way, but obviously with every site is different and different elevation and so on. Um, but you mentioned before, [intentionally left blank], um, that, um, they were creating kind of a passive experience for customers as well, or for participants, um, could you give me an example of that, sorry?

B: Sure. Yeah. So, as an example, we offer ziplines where participants are involved in their own speed control, um, and even their own stopping. Um, and we also have ziplines where you can sit, you can fall asleep on the zipline if you really wanted...

[Laughter]

B: [...] and the braking, the speed control and the braking is done completely for you. Um, so we offer both options and, um, over the years our clients have been picking, um, the option that has more passive braking systems more often than they pick the active one. Or, if they pick the active one, they've now asked us to add an additional brake into the thing, so that should the person not do their job, there would be a back-up, which we've always had back-up, but they want, like, a back-up to that back-up, because they're saying if the first back-up fails, what about, you know, because we just can't trust people. And so, it's becoming an interesting thing. And then, as far as the, the, like on a challenge, on a more like, where people are climbing, or are like on an aerial trekking part, or on a... um, you know something where it's more climbing involved, there's a lot more, um, it's a lot more handed to you. You're not necessarily having to figure it out or choose your path as much. It's a lot more linear, because you can process a lot more people if people are, sort of, funnelled through a system, or, you know, systems without harnesses, so you're climbing through nets or you're climbing over water or whatever, so you're not having to, like, worry about them using a harness properly or worrying about them having to use lanyards properly. So, even something as simple as the smart belay system, you know, where you have to teach them how to move themselves around, people don't even want that anymore, they just want them to, like, climb up on a jungle-gym and it's turning more and more into a... an amusement park or playground-style, which is interesting to me.

M: Right. Oh wow. Yeah, so, so they're even moving away from the smart-belays as well with you?

B: Yeah. I mean not necessarily 100%, but it's definitely something we're being asked to look at. Um, but then even in the traditional education-based system, um, we, we observed some clients last year who were completely education-based, but because they sometimes see such large school-groups, they want to get them all to do more, right? So, it used to be acceptable to, sort of, have these small, or easier days, and now it's like the kids have all seen a zipline and they all want to do everything, so, the summer camps are even adding smart belays to manage the risk of incidents, but also because then they don't need as many staff and then the kids can, the kids are involved, but they don't get to, like... you

don't have the risk of double unclipping. So, it's interesting. So, the people that were always involved in getting and saying: "kids are going to learn how to belay" and "kids are going to learn how to transfer", "kids are going to learn how to tie knots", now they're using smart belay. The people using smart belays are saying "we want to go to nets or water" or whatever it is. The people who are doing that are, like, "we want something even more bigger and faster". And so, everyone's kind of moving up a notch.

M: Oh wow. OK. OK. Well, um, well, yeah, that's incredible that is, that even they've changed as well; the educational side. Um, you mentioned as well that one of the things you find important is, um, engaging the staff. Um, in your... in risk management and so on. So, how do you monitor that the risk management procedures are being followed throughout the organisation?

B: That's a great question. So are you asking at my organisation, like how do we have quality assurance for us as a vendor?

M: Yeah. Yes.

B: Um, so we... Yeah, so we have an entire training programme that our staff go through. You know, they have an initial training and then they have ongoing audits that's done, it's not done at the end of each project, but at least at the end of every season, because sometimes they're doing a big project the whole season and sometimes they're on 15 little projects. Um, and so we have... we do that as an internal audit. We also have a weekly check-in for our trainers specifically, during the training season where we discuss, um, any potential risks that have been identified either at a client site or that the trainer has experienced and they have to bring that to the group and present the issues so that it can then become, um... we can then manage around it. Um, and then, um, and then, um, really we just have a ton of policies, I mean our policy manuals are binders upon binders. Part of that is just to protect us, but the other thing is we think is if we teach the staff and we have it down in writing and we explain to them, we teach them the difference between negligence and gross negligence, to say to them, like: "you, you know, if you make a mistake, we'll support you, but if you do something differently than what we've trained you and we've put it in writing and we've told you how to do it and you don't do it, then you're on your own and that's a really scary place to be". And so, we sort of... we give them this education on risk management, we have a textbook that we wrote and it has an entire chapter on risk management and their responsibilities, because it's so important for us that they understand. We joke that they get hired as, like, guides or installers or trainers, but

they're real, hidden title, is risk manager. We just, we don't beat around the bush, we just tell them, right? We just tell them. We're, we're... And then, and then to control it, I mean, um, we have a hierarchy of course, so we've got, you know, foremans and superintendents that are monitoring younger and newer staff and, um, and so they're just trying to do that all the time. We've got safety meetings, we've daily safety meetings, when we're doing installations, that happen every morning and they have a meeting about it, so, and then there's ongoing training at the... site. So it's kind of an ongoing process for us.

M: Wow, OK. And, um, so how do you, how you, um, you may already have touched on this, but how do you empower or encourage staff to, to really, I guess especially the lower-level staff, to really share the information and knowledge that, that they obviously possess from their experience, from building the courses or... and so on.

B: Um, yeah, so we have the daily safety meetings and it's an open chance for everyone to talk about what they need. For our staff, that aren't on installations, but are training or inspecting, we have a weekly meeting where they can share their, their, um, concerns or their thoughts, their positives. Um, and then in additionally, when we do, um, at the end of every project or every season, depending on what schedule they're on, um, they get a review, but the review is double-sided, so they... we review their performance, but then they also give us feedback on working as an employee in our company. Um, so that exists as well. And then we, and then, of course, I mean, we, you know, we've tried our best to make reporting of incidences something that's not punished, so, if you tell me something dangerous happened, you're not going to get in trouble and neither is the other person, but we try to explain that it's important that everybody learns from it. We are... and then, this part we're still working on, we're getting better at it, we're not perfect...

[Laughter]

M: OK...

B: ... um, at the end of every project, we're supposed to have a meeting with all the managers, every manager, even if it's not your project, it's just to come together, and they talk about, we put a report together about what went well, what didn't and any learning opportunities that there are. Um, that one doesn't always happen, because we're so busy finishing the project, but we try!

[Laughter]

M: Sure. Well, I guess that kind of leads on to my next question, which is, um, so what role do you think leadership plays in effective risk management?

B: I think it's everything. For us, for us it's, it's not something we just tell other people to do, we have to demonstrate it, we have to role model it, we take it very seriously. Um, we hold our managers to a higher risk management standard, they go through additional training, um, we have entire plans that they're responsible for, from a risk management standpoint, and emergency plans, incident responses. We expect them to have just a higher level of knowledge and then, and then execute that. So, I think for us it's very important. And we, we try very hard to have all of our managers model that behaviour, which is a challenge, because the more experience you get the more short-cuts you learn!

[Laughter]

M: Yes.

B: But, um, we talk, we address that. We know if there's a problem and so we just address that head-on and we just say it, like, "it's not an option". And so, um, an example...

M: I think it's only natural right?

B: Right. I mean our trainers, though, like we are very serious about, you know, ziplining for example, there's always pictures of people ziplining upside-down, and I always say to them, you know, we just, we just take examples of things we've seen that are not going well in the industry, in our company or outside, and we, we just talk about them and make sure people understand and then... Um, I mean, I think people in our company... our company, I think, it's very, um, part of a much, part of the culture, that if you, if you are going to show that you cannot be a good risk manager, above any other quality, it's going to get you fired faster than anything else, because it's, it's the basis of everything.

M: It's a huge part of your culture, basically, it sounds like, um, risk management.

B: Yeah.

M: Um, so in terms of the standards that you follow, um, do you follow a specific set or is it just... is it rules you've kind of made up yourselves or...?

B: No we are... so we are... we follow the ACCT standards, um, all the time, because we are a Professional Vendor Member for them. Um, so I don't know if you know the ACCT system, but...

M: Yep.

B: [...] you can go through the PVM process and that's something we've done. We're actually getting our... every three years they audit you and we're getting our three year audit next [intentionally left blank], so we're having people come in and review us, um, which is great. Um, so it's a good chance for us to remind ourselves of what we're doing well and what we could work on...

M: Oh, for sure.

B: [...] um, so that's happ... that happens. And then, ASTM, um, there's a committee, it's called F-24.61 and that's the, um, aerial adventure, um, group and that's the committee for the aerial adventure group and, um, our standard is 2959, um, and that's another standard that we follow, [intentionally left blank]. An updated version of the standard was just submitted to the industry and they're going to be voted on next week hopefully, in the next couple of weeks. Usually, you get 30 days to vote. So, that's happening. Um, we also, um, work on US Forest Services land, um, so in, um, a couple of years ago the United States government said that the US Forest Services could allow aerial adventure programmes to be built on US Forest Service land in certain cases and they have their own... they follow 2959 and ACCT, however, they have some additional requirements that you have to meet. And so, we comply with, it's called 7330, so we comply with 7330, um, and then every state, when you're working in the United States, has the option for how they want to govern and regulate. There's no national... I mean, there's national standards, but there's no national law, though, and so, um, every... so we built in [intentionally left blank] and [intentionally left blank] has a really funny set of sub-standards and [intentionally left blank] has a... is known for having 55 extra standards that no one else have...

[Laughter]

B: [...] and we, we built there. Um, you know, um, so we comply... any state that we agree to do business in and we to comply with whatever their regulations and standards are. Of course, because we're in the States we have to follow OSHA, um, that's the standard that we follow, and that's for Occupational Safety, um, and Health, so that's our, our employees, you know, we, our employees have a set of standards we have to comply with when they're doing work and then, um, we're a business so we, obviously, have to follow business practices as well. Um, so we're... especially, one of the things that I spend most of my time on, is making sure we're compliant to the standards.

M: Yes, it sounds very complex, but it sounds like there's a tonnes of different ones.

B: Um, yes, it is. It's a constant battle to keep up and then, um, help the regulators understand how we meet the standards.

M: OK. Um, so how, um, how does, um, the, I guess, you've built in various states, but how have you found that the state, and I guess other stakeholders, like the insurance providers as well, how do they influence the risk management procedures within your organisation?

B: That's a great question. Um, so, insurance I would say, um, advises us as to what incidences are happening, so then we can then ensure that we have policies or procedures in place to then minimise the risk of those incidences occurring. Unfortunately, there's no national database for incidences and I think that's one of the things that our industry at large has been saying for at least a good 6 years. We need, we need. And then, we're still not doing it, because of everyone's afraid that it's going to somehow going to get them into trouble if they're tracking that information, but we really haven't seen that that's the case. Um, the regulators, the people that issue operational permits, the ones that say, you know, because we build the zipline and then someone else in the state gives permission for that company or for us to run it. Um, they absolutely, 100%, influence what we do, because they are the ones telling us what standards or what policies we have to follow to be able to, to, um, open to the public. And so, um, they, they affect us constantly. I spend a lot of time dealing with regulators and permit, permitting agencies, to make them feel comfortable with what we've done so that they'll issue the permit so that operators could operate.

M: Right. Would it be easier if there was just one standard that everyone just adhered to?

B: Um, I think, I don't know if one standard is necessary, however, I think that the challenge we find... because I think that you'd have to... it would be so hard to write, there'd have to be so many caveats, so we... yes. I mean, it would be nice on some level. But, I think for us, the bigger challenge is, um, having a way to support regulators and permitting agencies and insurance companies to understand, and operators, what the standards are and then hold people accountable to the standard. Standards are subject to interpretation and so, for example, I had a regulator telling me I wasn't compliant and I said, "Why?" and when they explained it to me, I said, "that's not what the standard said" and we pulled the standard out and I, he showed me why he understood it this way and I showed him why I understood it this way. And maybe we were both right, because we were both reading the

same standard and seeing it differently, but, um, so what we ended up doing was, and this is in regarding ASTM standard, so we called the ASTM, um, director, um, you know the person who runs the organisation and said, "can you tell us how you read this standard?" and when he did, that gave us an answer and I was lucky that time, that I was interpreting it the same way that he was. But, it doesn't necessarily mean the other person was wrong, but, we've heard of crazy incidences where an interpretation, or a viewpoint, on a standard has caused companies to have to, um, put something in place or show compliance in a way that I just don't think was ever the intention, and then that snowballs to other people imitating that behaviour and then suddenly you're not doing the standard. I think, the other challenge that we find is that standards are minimums, right? A standard is a minimum, it's not a maximum.

M: For sure. Mhmm.

B: And sometimes we struggle with operators wanting to meet the standard, so they only want to do the bare minimum and for us that's an uncomfortable place to live if we know there's, like, something additional you could do to make yourself more, um, you know, more in line with what the industry expects.

M: Right. Because, that's actually... I mean, that's a huge thing in risk management isn't it? Where some people are just focussed on being compliant rather than actually, um, going beyond that right?

B: Right.

M: Um, so, do, have you found, do these, do the regulators, do they actually have industry experience? Or is it somebody who's never been on it?

B: No. No. I would say it's few and far between where they have experience. Um, a lot of times they have government experience or administrative experience. Now, they may have experience in some type of construction, um, so that's always interesting, because then they're a specialist in one thing. Like, maybe they know, they know, they know about wood, they know a lot about wood, they know a lot about cables, they know a lot about stairs, they know a lot about... you know, metal and welding, and so it's... they're a specialist in one thing and that's typically where they'll the most of their attention. So, if you get someone who knows more than you about a certain building practice, that can be interesting trying to, trying to have a conversation, because, like, they're... but they're not... I mean, there are some places that have regulators that are... um, so removed from the

industry that they cannot even participate in the activity, because they don't meet the rider requirements to ride the ride, which is always super fun.

[Laughter].

M: Right. Yeah. Yeah. I've experienced that in another... I used to be an operator and, um, in one state, I mean, you basically just sent a check every year, for, to the regulator, because they, you know, they didn't really know what they were looking at. So, um, but, [intentionally left blank], do you, do you collaborate with other organisations in the industry? I mean, I know you said you're a member of the ACCT, so are you... actively involved in, I guess, would you consider sharing, um, risk management data, information with your... um, colleagues in other organisations?

B: Um, well, we have to, we have to share our information with, to be a PVM, because it's a peer reviewed process, and so it's not... you have to open your books and show people stuff. Um, the way that, um, the standards are written, when you, um, say ASTM, when you give the operator a, a product, [inaudible], you don't, it used to be that you would just hand them a manual, you know, for how to use it and maybe you'd train them and that was, sort of, enough. Now you have to give them a copy of the plan set, a copy of the engineering calculation, you have to give them, um, you know, all of your background data for why you designed it the way you did. So, um, realistically you're giving them, sort of, the... a step-by-step process of how you did your job and why you did it the way you did and so, if they really wanted to, they could rebuild the ride themselves and that's, and that's fine on some level. So, we do, I feel like, a lot of our information is disclosed, not necessarily to the public, but to the people that we work with, our clients, the regulators see everything, so it is very much shared. Um, sharing with our direct competitors, or just putting it out there in the industry, um, for us, definitely we would not... we would like to find a way to share incident reporting in a way that would benefit the industry. I don't think that, like I said, that's a system that everyone wants, but no one really knows how to set up to make it, um, effective. The, um, the, the flipside of that, like, sharing how we do, why we do, what we do, that is something I think that's actually interesting, that our industry does that more than most industries. You're not going to find Toyota sharing with Honda how they built a car, um, but you will see that in our industry, which is interesting, because I don't know if that necessarily benefits people or if it just helps other people be as good... you know, it's not, it's not making me anymore money, so I don't know why. I understand how we got there, but it's interesting.

M: Yeah. It's, um, well I mean, that's part of what I'm, I'm, I'm, well that's really the main thing I'm looking at here, is, um, you know, the competitors, essentially, um, collaborating, whether it's possible in the industry. Um, do you find that there's a lot of collaboration going on in the industry, um, currently, or are people hesitant in chatting to each other?

B: Um, well I think that, um, I think that, you know, we use, we collaborate with, um, our equipment providers a lot, and so like, we will ask Petzl, ISC, French Creek, you know, the vendors that we use, you know, Head Rush. We'll go to them and we'll say, "Well, we'll plan on using your piece of equipment in this way, what do you think?". So, we collaborate with them, because they built the helmet or the harness or the trolley or the rescue system and we want to use it in this unique way, so we like to partner with them, we have partnerships with a lot of them, um collaborative partnerships, um, in that way. We do, like I said, because we manufacture we make custom systems, we will sell those to our direct competitors, so our direct competitors do buy some of our products, which is interesting and because they're custom products, sometimes they ask us for additional support so they can use them properly. So, we do that. We do collaborate with a lot of our clients, you know, we'll ask them to test new ideas for us or we'll utilise their course to provide some trainings to the, to the general public, um, or to paid industry professionals. So, we do collaborate that way. To collaborate with a direct competitor, um, because of the ACCT, we do that a little bit, but it's not necessarily something that we do very often. Um, I think that that would definitely be the one place where the line, sort of, gets drawn and it's not that... now, because the industry is so small and so specialised a lot of our staff, unintentionally, do that for us, because, um, you know, over the course of a career, someone might work, I personally have worked for 1, 2, 3... I've worked for 3, um, ACCT PVMs directly, um, and in management positions, and several others part-time as just a base-level employee. Um, I know that that's all proprietary information, so I don't share it, but at the same time, like, my way of looking at the industry has been developed by having all those experiences, so I'm sure there's been some cross-over happening subconsciously.

M: Yeah. For sure.

B: And I know that we do that. We lose employees or gain employees when they're unhappy with us or unhappy with our competitor...

[Laughter]

M: Yeah.

B: [...] you know what I mean? Switch who they work.

M: Um, do you see any benefits in collaborating, um, with your competitors?

B: Um, I mean I think that there are others, there are other smart people in the industry, so I am sure that they would have, like, some good ideas. I think, because, um, our companies would only be merged part-time, I think that, um, the challenge would be, "then what?" Right? So, now we're not collaborating anymore. "Are you going to take that...?" Like, how do you go afterwards? So, I think... I mean it's a lofty goal, but I don't know necessarily if, um, from a business standpoint it's a great idea or from an individual standpoint. Um, I do think it has a lot of benefit at the ACCT conference. 3 years ago and 4 years ago, another PVM training manager and I we co-presented some training sessions and we talked about, you know, we're two PVM training, but it wasn't necessarily from a business... it wasn't like our businesses merged it was just we are colleagues and we thought we would bring two unique perspectives to a training seminar, so that happens. But I don't think, like, our companies would ever merge and do a collaborative project.

M: No. For sure. Yeah. Um, and I'm thinking more in terms of, like, the knowledge, like you, you touched on before, you know, um, in terms on incidents and so on. Um, sharing what you've, I guess what you've learned from various, um, events and so on.

B: Yeah, I think that sort of collaboration if there were, if there were... I mean I think that happens at the conference during education seminars, I think that that's the best resource of having a national association, than more than having a national set of standards. You know, we go to local, um, symposiums and, and conferences and we go to national conferences, we think... because... and that's information sharing and... it'll only make our industry stronger and safer and, and better for everyone. And so, yeah, I think it's important and we're very active in presenting and then attending sessions to try to, you know, just... collaborate on information.

M: Sure. I mean, do you think it's a challenge that a lot, I mean from what I can gather as well, a lot of the stakeholders in the industry are, you know, small businesses as well, so time is kind of, um, limited if you like. They don't, perhaps, have the resources to do it neither.

B: Um, to do what? To share information?

M: Yeah.

B: I think that's a challenge. I agree. I'm, I'm fairly disappointed with how expensive some of the conferences have become, and that's not just the ACCT. I mean, the American Camp Association, the Association for Experiential Education, the, um, AORE, I forget half the... you know, there're so many acronyms, but, as they get bigger as associations the costs go up and I'm don't know if that's because they want to make more profit or because it really costs more to put on, but it saddens me and, you know, there's always opportunities to, like, you know, get a scholarship or, you know, volunteer your time, but it is, it is crazy to me that less and less people can go. I mean, our company, for example, the conference... and again, part of it is a distance thing, the conference for ACCT is in Georgia this coming year, in 2017, it's in Georgia, which, for us, is a two-day drive or we have to fly people. We're sending [intentionally left blank] and it's going to be several thousand dollars.

M: Oh, wow!

B: And we, and because we're presenting and because we're a PVM and because we're going to pay for a booth and because we're going to pay for some advertisement, we get, we get, you know we pay for something we get a break somewhere else, but in the end it's thousands of dollars and we're the top of our team, so all of our base employees aren't... you know we're going to come back and teach what we can, but it is unfortunate that there's... I think right now there's 50 PVMs in ACCT and then there's a lot more... there's a lot more people who provide services that are not in the PVM process, but just choose to be members. Um, if each of those companies sent all of their employees or the majority of their employees, the conference would double in size, and we don't. So, I know PVMs that send just the owner or just two people, you know, so it's a small portion attends. So, it's very interesting, like, who even is a part of that educational system, what tier of employee you have to become before you can even attend or you have to pay out of pocket, I mean. Or, you're, or you're that awesome employee that pays out-of-pocket. You know, because you know it's important.

[Laughter]

M: For sure, yes. And then, then the question is, you know, how much does the company actually get out of the ACCT conference, if it's only one person going, right? Yeah, that's a challenge for sure.

B: Right.

M: Um, do you. Um, I mean, what kind of... what do you believe is required for, um, collaboration to work in the industry? I'm thinking, in terms of, um, trust and, um, individual skills, because obviously there's always, when you're dealing with your competitors, there's a trust issue, isn't there, and so on?

B: Yeah. I think, you know, I think trust is fine. You can sign NDAs and you can have non-competes and, you know, there's ways around that. I think, um, for our industry, because it's expanding so quickly, so rapidly, I think the first problem is just time, right? So, I've been having this discussion with some of the other PVMs about people who had time ten years ago, before the industry became so large, they could volunteer all the time and now they're like, they barely... they don't even get a vacation anymore, because work is year-round, it used to be seasonal, like. So, I think, um, some of barriers right now are time, literally. It's crazy to think about, but our industry has shifted from, sort of, very small, seasonal, fun, you know, sort of very crazy thing that was happening, to this very public massive thing. And I think time is a huge barrier. I think, um, um, sort of an infrastructure to be able to share information is another barrier for us, you know, so, for skydiving it's been this way for so long, but there's a magazine, there's a couple of magazines that publish incidences confidentially, they just sort of give the learning opportunity from it. Um, and we've talked about that, but then it's like, "do we even have a magazine that we could use?". Well, we only started recently getting a magazine, sort of, more dedicated to our industry in the last two years, so, maybe now we could use that, but before that... you know, so there's not an infrastructure necessarily in place. And then, um, I think the other thing, um, would be, um, controlling the information. So, like, trust is one thing, but the next level is like, "are you really right", right? So, the same thing with the regulators, mis, misinformation, misinterpretation. [Intentionally left blank]. So, I've been to quite a few sessions over the years. Sometimes I attend sessions to learn, not to learn, but to stop misinformation. So, literally, a couple of experiences we will sit in a class and be, like, raise our hands and say, "are you sure you meant that, because what you just told this entire room of 300 people is that if they don't do this, then they're not safe, but I don't think you mean that". You know, and... so, I think that that's another really big barrier for collaboration is... just... controlling the...

M: Managing the information?

B: Yeah. Managing the information, yeah.

M: OK. Yeah. That's actually a good one. I hadn't thought of that one. Um, yeah. Thank you. Yeah. Um, especially today, with all the, um, different avenues you have to... you have for different information. Um, so do you think...?

B: Yeah, I have literally... just as an example, this just happened today. I had a regulator tell me that that person is putting a helmet on and they have a hat on and I said, "OK.". And they said, "well, you can't do that, because I learned that if you have a hat on..." and I said, I said, "well, where did you learn that?" and they said, "someone told me", and I said, "well, let's pull out the helmet's technical notice and let's see if the technical...", you know, like let's really follow this, because the whole idea of, like, you know, "oh, I heard that 2+2 is five" and it's like, "well, where did you hear that", right? So, um, and so, so, it's a big passion of mine to try to help show people that.... [Inaudible]. So, it's just crazy that people don't do that.

M: No, yeah. For sure. Yeah, I think, especially, if you're dealing with regulators that don't really have industry experience, you know, they're susceptible to just, you know, take any information on-board, right? Um, so, I think, and you touched on this, you've just mentioned the need... so, would it be beneficial to create an industry body, do you think, that just focussed solely on, um, risk management procedures, um, within the industry? You know, like the ACCT, how...

B: Yeah. Absolutely. I think that would be a huge benefit. I don't know how we're going to do it. I mean, we have ASTM and it's got... we have paid people that run the organisation, but they're not running our industry. So, they run the organisation, like, you know, they collect membership fees and they take phone calls and they sell standards, but they're not, um, and it's the same thing for ACCT, they're not necessarily monitoring the industry. Now, we have volunteers that need them that, you know, try to support the industry, but I absolutely think that, um, I would love to have time to keep our industry on the right path, but then I also wouldn't be able to work for this company...

M: For sure.

B: [...] you know, like, pick one or the other, and so, I absolutely think the same way that, um, government has regulatory agencies that's job is not to do anything with the industry, but just to watch the industry and, you know, keep the industry as safe as possible. I think that our industry absolutely could use some sort of organisation. How that would work,

who would pay for that, what their responsibilities would be, how they would be qualified to do... I don't even have a... I am not the smartest person, so I would not know!

[Laughter]

B: Um, I think that it is absolutely a huge need and not having it has led to people, other people controlling the direction of our industry, like regulators, that don't necessarily have the insight.

M: OK. Um... OK, yeah, because, um, I guess, through an organisation like that, um, you know, you could submit information confidentially, so you're not necessarily, you know, giving it directly to your competitors, um, you know, it's just like a knowledge pool that's, um, sitting there then, essentially. But, do you... you're not quite sure how you'd like to see it implemented then, or?

B: Yeah. I don't know... exactly. I don't know how we'd implement it. Um, I mean... yeah. Or, how you'd structure it or what it would even look like, really.

M: Right. Yeah. Because, well one of the thoughts that I had was that you could do something like an elected group again, like the ACCT, where they elect them. Um, but so, do you think, again, going back to leadership, you know, what, or how important do you think leadership is, um, in ensuring this, you know, becomes... effective, I guess, collaboration within the industry.

B: I don't... sorry, I don't think I understand the question, so can you say it again?

M: Oh, yeah, sure. So, what, in your opinion, what role does leadership play in ensuring that, um, you know, collaboration within the industry would become a success, you know, say, through an industry-body for example. How important is it that somebody really takes charge of it says, "This is what we're going to do", for example?

B: Right. That's a good question. So, um, interestingly, I don't know how involved you are with the recent election of Shawn Tierney, the new executive director of ACCT. We used to have a man named James beforehand. James just moved on to something else, but I, I had less of an opinion on it, because I felt like my personal philosophy is, if you're not part of the solution then you can't really complain about the problem and I don't really have time to be part of the solution, so I can't complain, but I did have colleagues, um, other long-time industry-professionals, saying that they didn't feel like their voice was heard always, um, in the past, and now they feel like Shawn is doing a better job of listening and I think

that that is huge for buy-in, so that people are invested and want to, to support the organisation or support the leadership. Um, I think that, that the, the reverse of sort of safety management, where the, you know, the top tier of employees helps create a culture that makes the base-level employees behave. I think, when you're working in leadership across an industry, you, the top tier person, actually has to be a voice, or a representative of the base-level, of these vendors, so, like, I would want someone that would represent my interests. Similar to the way government should work, when it's working well...

[Laughter]

B: Right? I think government is a lot more, I think, government is a lot more effective when the voices of the people are heard, versus the top, versus the elected representatives, um, having their own voice and going in their own directions and not necessarily listening to what their constituents want.

M: For sure.

B: So, I think that for any organisation to have success we would, sort of, want something similar to that... hopefully. And that would be really important from that perspective, for me.

M: And do you think it could work if, um, if there was some collaboration with public agencies as well? Um...

B: Um, yeah, I think that it would be helpful. So, we've found success with ACCT and ASTM representatives going and speaking to state regulators, um, and educating them has been very successful, um, and I think the more proactive we could be on that front, um, the more effective and united the industry would be in how it's represented across the country.

M: So, do you think it's required for, for it to be successful as such? That, that, you know, there's some government involvement as well? In whatever shape or form.

B: Um, I think, I think my opinion on this has changed over the years.

[Laughter]

M: OK.

B: In the past, in the past I was very much a fan of ACCT, sort of, my interpretation of their philosophy, which is my opinion, that they, um, ACCT, I was always... I used to work for

some of the founders of ACCT and they said, "We formed, because we never wanted someone else to tell us how to run our industry. We are the professionals of the industry, we want to tell other people what the minimum standard should be, so we're going to write the standards before someone else does".

M: Right.

B: And, then, the states, some states, loved that and were like, "we're going to follow ACCT, ACCT is great", and then when ASTM came, states were like, "ASTM is great, [inaudible]". But, then what has happened is, the... we weren't necessarily proactive in seeking out government regulators to regulate and we said, "Oh it's fine, because we're regulating internally". The reality was that every time there's been an incident, that state is looked to and they say, "well, what, who's the oversight", right? And ACCT doesn't say, "We're responsible", right? Actually, they don't say that at all. And so, you can't, you can't have a self-regulatory, um, body, you can't have something like ACCT or ASTM, um, regulating, so therefore you have to push the regulation off on to someone else and if you just say, "well, no one will regulate and we'll just... we'll just trust people to follow the standards". Well, they're not going to. It's just the reality and so, I think, there's some states right now that have no, no state-wide, or even county, local standards for what's required, so people are just doing whatever, whatever they want or whatever they think is appropriate or whatever their client is asking for. I don't think that that's bad, at the same time I think we're one incident away from having that and what happens when... so for example, Nevada has really no oversight or regulation, Nevada hasn't had an incident yet, thank God, but when they do have an incident, two things, one or two things are going to happen: either the incident will be ignored, which I doubt!

[Laughter]

B: Or, the state will, will, you know, the news media and the state will look at the situation and say, "well, how are we protecting people and then you'll have to have an answer and if you're making an answer in a crisis situation you run the risk of having really stringent or, like, ineffective standards put on top could crush the industry. Whereas, if I could go to the, or any state really that doesn't have regulation, and say, you know, "you're not regulating anyone yet, but might you consider at least requiring that people, you know, use one of these standards to, to whatever, or at least, you know, get a, get a list of who's out there". There's just something...

M: No, I get what you're saying.

B: I mean, again, the challenge with that is that everything that I just said requires money, right? So, Nevada doesn't put any money towards it, right now, and now I am asking them to put the money towards. But, um, I think we either have to be proactive or retro... reactive, and I think it's more effective to be proactive. So, like, almost, in my past life I would have been, like, "no, no. Let'em just do their own thing" and now I'm like, "oh I'd rather you, let's be proactive, have a position now, while everyone is not hurt". And you know, maybe the regulation is very light, but not, not something... in my opinion it's better than nothing.

M: Right. Right. Because, I think it was in Maryland where they chose not to regulate and, um, um, you know, they're right next door to, um, the unfortunate accident that happened, is it Delaware? Where a lady fell off, right? And, um, it will be interesting to see if they react to that in Maryland now, because they actually chose not regulate the industry, even though they have got a couple of big courses there.

B: Right. And North Carolina is an example. North Carolina didn't have regulation, um, and there was an, an incident, um, at a summer camp and they were really, like, and they had... the government issued a task-force and this task-force, these are just government people, they don't... they know nothing about ziplines and maybe they've never even gone out into the woods. Um, but ACCT came to... ACCT, um, sent a group and said, "we'll give you any information you want, we'll support you anyway you want, but we just... before you make any decisions can you just listen to us and let us give you some real facts and, so you're not reacting based on this one incident, well let's give you some facts". And, it actually worked really positively, but, you know... um, on the flipside, California...

M: What did they decide?

B: [Laughing] yeah, they were [inaudible]. Um, North Carolina actually decided not to change the standards. They have some standards in place, they're just very minimum, that when the incident happened, um, where there was a death at a summer camp, um, there was discussion about creating some additional regulation to mitigate the risk of that incident happening again and the ACCT was able to show that in this specific incident, that, like, accidents happen and they should, of course, be analysed and looked at, but that we're not going to suddenly add all of these additional rules, because that wouldn't... there's no... every rule they were thinking didn't really necessarily mitigate the risk, and so,

really you're just adding rules to add rules and that doesn't necessarily make the industry better. And so, North Carolina actually accepted the opinion, which is really impressive!

[Laughter]

M: Yeah, that's really. Because, like you said, after such an incident, it's so easy to just, you know, act on your emotions as such and, um, and go overboard. So, I think we may have covered this already, [intentionally left blank], but do you believe that, um, you know, such a collaboration, would it be more effective on a, um, on a, say, a state level or regional level or how do you see it being most effective?

B: That's a good question. There are actually quite a few regions or states that have started to create, um, like small groups. Um, North Carolina, for example, now has a group, um, the Northeast has had a group for years, the Northwest has a small groups, um, you know, there's a few [inaudible] between it that do stuff, but I actually think the small group that then feeds into the larger would work really well. It seems to work well... I'm not as involved anymore with the American Camp Association, but it seems to work well for them and so I think, potentially, that would be a great way to do it. Additionally, I think that that would open up the option for more local and regional conferences, um collaborations, you know, and then some of the barriers to, sort of, national involvement might be mitigated, because you could now do things more locally.

M: OK. OK. And, um, do you think that, you know, such a collaboration should focus really on everything or should it just be, you know, operations or just building or just equipment? Um, do you see it as a more all-inclusive approach as such?

B: I think I see it more as, um, more all-inclusive. Obviously, there's going to be certain people that, um, certain areas might have more of one type than another, but I think that if you open it more as sort of an industry concept, that it will, it will sort self-manage into what category it needs. Um, most organisations that I'm involved in look like they, sort of, focus on the providers and the, um, the providers from, like, the building standpoint and the providers, like the operators. Um, obviously, the public could come, because they're, they're a stakeholder, right, as in the general public could come, but they're not really going to come to this sort of thing. Um, but I think, those two groups, you know, work well together. And then, other, other individuals are, of course, invited, you know, regulators and insurance agents, but I think those are the two groups that, sort of, manage the

industry on a day-to-day and those are the two groups that usually come together when we have these opportunities.

M: OK. Great. I have one more question for you, [intentionally left blank] and that's it.

[Laughter]

B: Sure.

M: Um, so going forward, how do you see the, um, I guess, really the, um... what does the future look like for the industry?

B: Mhmm... I would love to predict, because then I think I would be so much richer, but, um...

[Laughter]

B: [...] No, it's really, I mean, yeah. I think, um, you know, I think that there's going to be a lot new innovation. I think the industry is still growing so quickly. So, more of what's already out there will happen. The market's not yet saturated. So, more ziplines, more challenge courses, more, um, you know, of all that sort of stuff. I think that there's going to be a lot of new innovations and people are going to come up with new crazy ways of doing things and that's going to help the industry continue to grow. Um, and I also see, um, that in places where, that there are places where the market is already saturated and that I think that is showing an interesting trend. You know, it's sort of like the rafting or the ski industry, right? When a market becomes saturated, you either have to show why you're different or you start merging, right? So, then businesses start to merge and then you start getting these, like, mega-giants, like... you know, right?

M: Right. Yeah. Is that something you're seeing? Mergers?

B: Um, yeah. We're seeing a little bit. Um, not too much yet, um, because there's not too many places where the market is saturated, but we are seeing places that, um, are having to, you know, innovate to stay... present or reliable or they're just seeing that the activity that they have is not, um, making as much money and so they're having to, sort of, like, keep it, but it's not necessarily the focal point of their company anymore. So, one thing we're seeing a lot of is, you know, um, instead of you being just a zipline company, maybe now you have a zipline and a challenge course, maybe you have a zipline and a rafting company, maybe you have, um, you know, ziplining and mountain biking, hiking and, um, a coffee shop!

[Laughter]

B: So, you're becoming this, like, bigger, bigger thing for people to go to, because they're not going to come to you, if you're just this one thing. Um, I think that that's a big thing. And then, I think the, um, the other direction of the industry is probably going to go in is it's probably go in is it's, of course, going to just get more regulation. I think, the bigger we get, the more eyes are on us. And therefore, I mean, this standard... [Laughing] we joke that when we used to give a course to someone, we would give them a 60-page document and now I give them a 6-inch binder!

[Laughter]

M: OK. Yeah!

B: It's just crazy, what I have to do. You know, and I think that the, the types of jobs are also going to change because of that. You know, so, you can't, you're not just going to be a builder or an operator anymore, you could be a regulator, you could be a, an auditor or you could be a, um, inventor, or, you know. So, lots of nuanced job positions.

M: Many different hats. Yeah, for sure, yeah. Well, I mean it's like you guys, right? You've got your fingers, you know, in everything or whatever the saying is, right? I mean, you're doing so many different things, yeah. Right, [intentionally left blank], I mean that's, that's all I have. Um, thank you so much. This has been really, really good talking to you.

B: No problem. I enjoyed it as well, Marcus. I have one question...

M: Yeah?

B: I just wanted to know how you found me or [intentionally left blank].

M: Um, [intentionally left blank]... well I am a member of the ACCT, um, I've heard of [intentionally left blank] from, um, when I was in the industry, um, myself, just through word of mouth, so my wife and I we founded Monkey Trunks up in New Hampshire and Maine.

B: Oh, OK.

M: Um, and, um, yeah, so I've heard of [intentionally left blank] through that and then, um, so, you know, when I'm thinking about, you know, "who do I want to contact for, um, um, this study" obviously my first thing is going for the company names that I already know and so on. And then, um, I read about you on the website and I thought, "Well, you've got the

experience". Because, obviously I have to have... my sampling strategy is, I'm after senior managers at least and, um, so, yeah, you fit the profile, if you like.

[Laughter]

B: Thank you. [Inaudible]. I know. Maybe it's time to get out. Alright, Marcus. Well, thank you so much. I, um, I hope to read the study when you're done, or, are you going to come to the ACCT this year or are you not going to come, because it's so far away?

M: I was hoping to, but, um. Well, I was actually hoping to, but I graduate a couple of months later, so, um, my university have told me that, after Christmas, no more conferences.

[Laughter]

M: So, um, it will have to 2018 instead...

B: I think it's in... where is it? Texas there? Or California again? I've lost track.

M: Yeah, I think it's Texas. And that's, you know, that's alright. Much better than California anyway, in terms of distance. So, yeah, I'd love to. And, I'd love to come and present my work as well. I think that would be, you know, not just important for me, but, you know, also important for, for my work, um, so, you know the industry can really see...

B: No, I think it'd be great. I mean, 99%... it's so funny, because 99% of the questions you've just asked me I either have given a lecture on or done a seminar on or something in the past year, like, we just did a whole big thing with [intentionally blank] about half the stuff you just asked, so I think that would be amazing! And I would like to...

M: That's fantastic to hear, because that means that obviously I have done my work alright then. Um...

B: Yeah, that's right. Yeah, you should read the Adventure Park Insider, I mean, they're not my favourite publication or whatever, but a lot of the stuff you've asked they ask all the time, they are calling up all the time to, like, "can you give an opinion on this?", "should we do an article on this?", you know.

M: I've cited them a couple of times in my study as well, because, obviously it's limited what, um, what literature you can find on the aerial adventure industry, right?

B: Yeah. I mean, they're the newest magazine. No, it's true. [Intentionally left blank]. So, yeah, if you need any more information or help, please let me know.

M: Oh, I will do. Thank you very much, [intentionally left blank]. Um, I can't thank you enough. This has been great. Um, what I'll do is, I'll go ahead and send you a copy of the recording. Um, do you have Drobox at all?

B: I do yeah. Just send it to the, um, the email address that you already have

M: Yep. That would probably be the easiest thing. Um, and then once I've transcribed it, give me a few days, once I've transcribed it, I will send that to you as well.

B: No worries. Thank you so much for that. I appreciate that.

M: No, no worries, [intentionally left blank]. Take care and have a good Christmas.

B: You too. Bye.

M: Bye.

Call ended

Participant 5 Conversation

B: Participant M: Me

B: [Intentionally left blank], this is, [intentionally left blank].

M: Oh, hey, [intentionally left blank], it's Marcus.

B: Hey, how're you doing, sir?

M: I'm good. How're you doing?

B: Not bad at all.

M: Good. Is this a good time?

B: Yeah. No, we can, we can make this work.

M: Oh, fantastic. Thank you. Thank you very much for participating, or choosing to participate in the study, that's great. Um, just so you know, um... do you prefer [intentionally left blank] or [intentionally left blank], sorry?

B: Um, either one is fine and, um, [intentionally left blank] is more personal-life and [intentionally left blank] has been work-life, because, um, there's a bunch of [intentionally left blank] at work or that work with us.

[Laughter]

M: OK. [Intentionally left blank] then. [Intentionally left blank] it is. [intentionally blank], um, I've got, um, I'm recording the conversation, um, just so you know, um, it's, um, basically, so I'll send a copy of the recording after we've spoken, um, and then, sometime, um, it won't be before Christmas, but shortly after Christmas, I'll transcribe the interview and send a copy of that to you as well. Um...

B: OK.

M: If that... does that... is that OK?

B: That works very well.

M: Oh, OK. Fantastic. Fantastic. Um, and obviously, um, it's, like I said on the email, it's all anonymous, um, or confidential. Um, now, you don't have to tip-toe around your company name, or something like that. I'll edit that out of the conversation as well. Um...

B: OK.

M: Yeah? Great. Um, so, um... well, let's get going then. Um, so, um, please tell me about your role within the organisation.

B: So, I am the technical operations manager. I am in charge of inspections, maintenance, and, um, retrofits and upgrades. We're a, we're an installation, um, a design, installation, inspection, training and operations company.

M: Oh, right, OK. So you operate and build as well?

B: Yes. We don't currently, um, have a site that we're operating. Um, we're in partnership and they took over the rest of the partnership and are running it on their own now.

M: OK. So, is it mainly commercial or educational, or a bit of both, that you are involved with?

B: Mainly, mainly we're... yeah, mainly we, when we operate, we operate commercially. Um, we build, um, for both educational and commercial, um, and some hybrid-style where, um, a portion a year they're doing educational, but the most of the year they're doing, um, commercial.

M: Right, OK. OK. Um, and how long have you been in, involved in the industry as such?

B: I've been in the industry for six years now.

M: Oh, wow. OK. That's great. Well, that's pretty much all the time then that the, um, that the commercial industry has existed, then pretty much.

B: Yeah.

M: And um, um, how do you... what do you believe, I guess, is the key attraction to the, to the, the, um, activity as such?

B: Um, I think there's a, there's a perceived risk that brings out the desire for, you know, that little bit of thrill-seeking that everybody has. Um, so there's that perceived risk there where there's also a very low inherent risk. So, it seems really scary and really exciting and, and really, um, out there, when really your risk is well mitigated, um, you know, versus going rock-climbing. Um, and especially doing rock-climbing on your own, versus the guided. But, um, the risk is a lot lower, um, because the systems have been designed, the, the entire, um, program is, you know, crafted in such a way to, to mitigate as much risk as possible.

M: OK. So, it's more like, um, an illusion of risk then as such?

B: Yes.

M: OK. So, how would you... I guess, how would you define, um, risk. Um, because, obviously, there is a bit of a strange relationship, um, with risk in the industry, um, because the customer, like you say, see it as a bit of a, as a dare. Um, but, how do you, how do you define it, as a builder, or an operator?

B: I think, I think the perceived risk is the fact that we put people at height on a regular basis. Um, that's also the actual risk. So, because we put people who have a minimal experience, minimal training at height, we're putting them at height and allowing in, in an aerial adventure park, where it's challenge course-style elements, um, and they're self-facilitating... that is actually where, um, the perceived risk and the actual risk both, kind of, start to balance out a little bit. Now, you know, we're, we're still managing different smart-belay systems and different technology, um, and the crafting of the course to mitigate that risk as much as possible, but, the... the thrill of being up high and flying through the air on ziplines or, you know challenging your physical abilities and, kind of, mental fortitude, um, with doing challenging elements at height, um, I think that is the part where, um, the draw is there. Um, it's also, because we desire that risk in life. As we as a, as a society move more into, um watching movies on our smartphones while we're going to work...

[Laughter]

B: [...] um, we don't get out as much. And we don't, we don't have that, um... as one of my old friends likes to say, "We're not running from sabre-tooth tigers anymore!"

[Laughter].

M: Yeah, that's a good way of putting it, yeah. Sure.

B: Yeah, but we're programmed to do that. Our internal, we, we desire that adrenaline. We desire that a little bit, where... that's what we used to have to do and now we get bored, you know, with the day-to-day. And so, we're, we're crafting that in the industry and we're also trying to mitigate that risk and with proper training and proper crafting of the course and the use of technology in, in a, in a wise manner, you know, going through and assessing everything, um, we're able to provide that perceived risk with a very well-mitigated... and the numbers, it's... well, it's tough in our industry and it's a discussion I had the other day, with, with some peers, um, who'd been in since the 70's doing educational stuff, and, um, we don't talk about a lot of... we don't have the same risk management committees that other industries have. We don't all get around and sit and talk about, um, and, and we're

not as upfront with our incident reports from different companies, different programs all over the country, that's not shared as much and, to me, that's where we can mitigate our risks. So, um...

M: Wow. Yeah, that's essentially...

B: We don't, we don't...

M: Go ahead, sorry.

B: Yeah. So, I was going to say, so, so we don't, we don't know exactly what the numbers per, per incident are, but comparing it to at-height construction work, um, with the, with the incidents that are publicised, we're... our numbers are extremely low on actual incidents. So, that's, kind of, where I am at. I think we're doing an exceptional job. We could do better and communication is key.

M: OK. Yeah. Great. So, what do you, what do you, um, I... you may have touched on this a little bit already, but what do you think, then, are the key challenges you face in managing these risks?

B: I think... communication between organisations, between the industry as a whole. Um, to actually document and run statistical analysis on what our actual risks are. Um, what, what, what the... um, what to expect in a ride-analysis, because that's something that we're doing a lot more in our industry, is analysing a ride from the beginning of conception. Um, so whatever the program is, starting at the very beginning and looking at all of the risks that we can identify, and I think that, if, as an industry, we're communicating all of the risks that we've seen and all of the incidents that we've seen, we can throw out the ones that are one-offs and focus on, on, well not completely throw them out, but set them to the side and look at the ones where it's the predominant number of our... um, the height, the high rate of incident and mitigate those, whilst still looking at the ones we've set to the side and say, you know, "what can we do for those as well?". Um, and I think that is, is there and also just the speed at which technology is coming out for our industry. Um, and, how fast it's adapted creates more risk. In some ways, because we're not, we're not able to analyse all of those same aspects of, like, what, and, and the right analysis of, "what could go wrong with this?". "Where are actual risks?". Um, so I think those, those are the two big issues is: not communicating everything to be able to analyse what is actually happening and just the speed at which new, new technology is coming out, new items are coming out.

M: Right. Right. So, there's a lot of innovation going on in the industry, then, at the moment?

B: Um, there's a whole lot and there's also a... half of the innovation is coming up, because of newer regulation. Um, so, we're, we're having to respond with, um, fail-safe or fail-to-safe, um, items and the, the differences with fail-to-safe is, without any other action it is automatically in a safe position. Fail-safe is just something that is sat there in case, um, the primary or something doesn't work right and that prevents further, further harm. So, I think that is, that's half of what's coming out with new innovation. Um, and the other half is trying to increase the thrill, um, there's, there's a huge upsurge in free-fall devices, like Head Rush's QuickJump and FlightLine System that, you know, a big jump. Um, the other one that falls into that pretty well is the, um, Powerfan freefall device.

M: Wow. OK. So, people are, basically, wanting more and more, um, in terms of thrills. Um, yeah, you have to change to product constantly. So, and you said, also, something about the, the smart belays, um, the various different kinds of them as well. Um, so which one do you use? Do you have your own?

B: Um, right now... right now the, the one that we're mainly installing with is the ISC SmartSnap.

M: SmartSnap? That's a new one.

B: Yeah. And so that's a, that's an integrated... it's a two-sided carabiner, where one, only one unlocks at a time. Um, and so, you have to be locked in, before it goes. And it uses a single lanyard system and we, we switched to that after a number of incidents and a lot of, a lot of, um, people took notice that there was a chance with dual-leg lanyards of, um, of entrapment and, um, there was a, a couple of big incidents where, um, with all the other systems, there were showing a chance of entrapment and choking hazards and, um, and that type of endangerment. So, that's where we decided to go. Um, we still work with clients that use, um, the Bornak S-Belay.

M: Yep.

B: Um, so, so we work with clients with that. Um, we work with clients with the, um, the French, the Clic-It system, a magnetic system, so, um, we have several people that are service-techs for that, so we go maintain that. Um, and then, we've got a couple of clients with the, um, Edelrid SmartBelay system.

M: Do you find it problematic with...

B: And all...

M: Sorry. Go ahead. Sorry, [intentionally left blank].

B: Oh, no. Go ahead.

M: I was just going to say, "Do you find it problematic that there are so many different ones"?

B: Actually, I think each, each one has its, its plusses and minuses. Um, they all have ways in which they can get cheated or beaten, some more so than others. Um, each one has, has also its price-point difference. Um, so I think that, depending on the client and what they're looking for... um, it's really dependent on, on the style of program, the level of liability and risk that the operator is willing to, um, take on themselves, um, the level of staffing that they're willing to put on to their tours. Um, there're some, there're some tours in the US and a lot more in Europe that don't use smart belays at all, that are still using the apparatus-style lanyard systems and they're doing really well, because they have the training, they have the staffing and they have the clientele that is, is reliable to use them properly. There are also other...

[Laughter]

B: Well, and that's the thing is that, that's with, with proper training at the beginning of letting somebody out on a tour, them showing reliability. And there's participants who don't really pay attention, who don't really... they're like, "yeah, yeah, I've got this", and they go out and... half way through the tour...

M: They get distracted...

B: Yeah, they get distracted easily.

M: Yeah. Yeah.

B: And, with, with the US that, that's, there's a high level of liability.

M: Right. Yeah. Of course. Of course. Yeah, that's what I've found as well, is that, you know, you can train them all you like, but they seem to forget it almost as soon as they walk up on the course.

B: Exactly.

M: So, um, what do you think, um... well, what, what does, and you may have touched on this already, what does effective risk management look like to you then?

B: Effective risk management comes with, with identifying, um, high-probability risk and then identifying, identifying as much risk as possible, what the hazards are, um, and what is... [Coughing] excuse me.

M: That's alright.

B: What's feasible to, um, to either educate through, um, but the best, the best message, the best... the easy way is to try and educate. Um, the best message are, um, creating as fool-proof of a system and so that's where smart belay or continuous belay systems work really well for, um, a challenge course. Um, otherwise creating competency in staff with good overlaps, so monitors, guides, that type of systems where there's a high level of industrious acumen, so that they're on top of their, um, they're professionals in the industry, um, and that's their... they're daily going in and managing that risk. Um, and I think those are... you know we can technology our way through most things and it works well, but as soon as you create technology, somebody finds a way around it or it creates another issue in the industry. Um, we see it a lot of times with retro-fits, where this new product comes out and you install it on an older system and, because they weren't originally designed to work together. There's some side-line things, like, you know, something wears out faster or it creates another, um, another minor issue and so, it's a, it's a very complex... I think overall it's, it's identifying hazards, it's identifying what the actual hazards are, what the possible hazards are and step-by-step taking the highest level of hazard and working to mitigate that without creating any new risk.

M: So, um, in terms of your organisation, um, what role or impact does risk management have, um, on the overall strategy, I guess, of the organisation?

B: It, it starts at the very beginning. We, I mean, we have, I, I also do a lot of design work and designing aerial adventure parks. Mostly, I do zipline tours, um, and I get to some place and I come up with this amazing dream of, "I want to zipline across that canyon and, and on to that cliff face" and that's the beginning, but immediately after, everyone in our design department, our operations department, our training department sit down and we go, "well, what does that mean? What do we need? How do we need to move into this and mitigate the risk for the participant, um, for the operational staff?". And then, also, "does that... how are we going to mitigate that risk of being in these locations and building these

things for our installers". And so, it, it starts as soon as the dream comes up and a lot of the time the conversation comes up before the dream comes up. You know, "what kind of system are we even going to go in and design?". Um, you know, "is the participant controlled, is the staff controlled, um, is it just very automated, anyone can do it without any, any real work, you just go and clips in and goes". So, we start there and that's kind of the beginning of, like, "what level of participation is there? What risks is that already going to do?", and then "what risks to create this ride?". And it flows through. It's a daily... every meeting we have there's discussion of risk management. Um, I think it's the heart of what we do. It's the most important thing that we do. And, thankfully, the most risky thing that we do are walking and driving, when it comes to any of those things.

[Laughter]

M: Yeah. I mean, it sounds like it's really embedded in your culture, really, of the organisation. So, um, you said you had... it sounds like you have several departments within your organisation, so do they each consider risk management separately or is it something you all do together, if you like?

B: Well, I think we have both. Um, so we, we focus on the fields that we, we specialise in. Um, and then we also sit and we have several, um, company meetings at different phases of a project, um, before, you know, going out and training and then, when we do operations we have daily, um, that go from management all the way down to... our most beginner, um, operators... side. Um, but those, those things, it's very cultural. Um, the main thing that we have that goes on, and it's, it's kind of our catchphrase, and it's, "anyone in the company can say stop".

M: Right. OK.

B: So, if, at any point in time there's a question or something doesn't feel right, look right or, you know, act right, stop. Let's take a breath, let's discuss this. Let's figure out what's going on and then, let's make the changes that we need to make. And then, once that's done, only the person who's in charge of that project, or that task, or that department can say "go".

M: Oh, wow.

B: So, they're, they have the ultimately say and that way anybody, there's no, there's nobody that feels like, "well, I don't feel comfortable saying something", because that's the culture of "anyone can say stop", um, prevents a lot of injuries and a lot of accidents,

because it's not like, "well, you know better? I figured... you know, you didn't clip in, you've been doing this for, you know 20 years and you knew... it's not my place to tell you, make sure you're tied off". It's everybody's place to tell everybody, like, "make sure you're being safe today. Like, and I'm seeing you and there's a chance for you to be unsafe right now, let's stop. Let's start over. Let's do this right. And that's, I think, I think that's actually the heart of risk management for everything is, is creating that culture.

M: OK. So, how do you, um, I guess, how do you monitor then from, really, from top-to-bottom that these procedures are being followed?

B: Ah, we do internal audits and then our, our CEO and our general manager are both very forward and very... like they come and check-in and, and ask us questions and they also ask, starting from the bottom up of, "do you feel that you're allowed to make calls when dealing with risk and when dealing with risk management?". Um, and so that... again, it's that culture, and really instilling everyone and checking-in and there's no, living with, there's no silly question and there's no reason that we can't take a pause to address anyone's issue, um, to make sure that everyone, everyone's safe. So, I think, once the culture's instilled it tends to run and, and having, um, having the very top concerned about that, more than concerned about, um, the bottom line or, you know, those types of things, or you know, "we're really busy, we're getting backed up, we need to get this going". No, it's... yes, we understand we have a lot of deadlines to make, but we need to make sure we make them correctly and incorrectly making them... it's making... number one is, safety is number one and after that we step-down and hit everything else. Um, and so that's, and it's, it's definitely difficult when it's a high pressure time, sensitive situation, because everybody's like, "well, no, we're good at this. We've got this. Don't even worry about it. We're fine. We're going to go, go, go. It's time. We've gotta get this done in the next two hours". That's the difficult time.

M: Right. Yeah. I can imagine. I can imagine, um, but so, how do you, how do you empower or encourage the lower-level staff to shift their, their knowledge that they've learned from being on-site and so on, with the, the senior management and so on?

B: So, we have regular feedback sessions, um, where, um, at different aspects of a job, um we actually request that, um, for, you know, "what's going well? Where can we improve?" and those types of things and we do, we do have, um, at the end of every job there's a questionnaire that goes out to our, um, installations team and our training team and then we have a, we have an after-job review where we review not only an employee's

performance, but allow them to, to review our field management teams. Um, and then with our operations, um, they do a morning briefing and generally do an afternoon briefing. Um, and, or, an end of day briefing. And an end of day briefing is a lot more like, “what went well today? Where could we have improved?”. [Coughing]. So, it’s, it’s, it’s getting that and it’s difficult, because some people are a little shy and some people are also, um, very domineering of a, um, conversation. If you can’t tell them, kind of, normally, sort of domineering of a conversation. But, there’s time to pause and time to check-in and do that once. Once people see it and they notice that somebody right next to them said, “no we need to fix this. Before we move on we need to stop, take a pause and, and fix this”, then it just becomes a standard culture and everybody realises that, you know, I have that ability, I have that right and I have that responsibility.

M: So, it sounds to me as though communication is really key, um, for you guys in everything you do. Um, so what role do you think that leadership plays in, um, in that?

B: It’s, it’s the desire and understanding. Um, the desire to do whatever, um, whatever it takes to maintain that. Um, for leadership, especially ownership, um, and especially stakeholders, I think, in the economics of the, of the program, because, ultimately they’re trying to pay all the bills and make sure that everybody has a job. Um, so they tend to have a different drive, but, in realising... I think leadership has to realise that when the system is in place, and it’s working, it’s more efficient and more effective and therefore it’s economically viable, but it has to start at the top-down, the whole culture, because management of everything has to be accepting that there may be times where somebody may say “stop”, just because they don’t, they don’t fully understand what’s going on and it can, it can cost a little bit of time, but in the long-run that branch is out. So, it has, it has to be from the top-down.

M: Right. OK. Um, and, um, now in terms of standards and so on, do you follow a specific set, like the ACCT or...?

B: We follow both ACCT and ASTM. Um, so we’re under the amusement park ride for, for about 85% of our installations.

M: OK. And, um, do you... now, obviously, I assume you’ve built in various states, are they all, um, how does, um, either the state or other stakeholders, such as insurance, how do they influence, um, risk management procedures within your organisation?

B: Um, I think, because most of the insurance companies are, or have been, traditionally, um, been following the ACCT or PRCA, and we don't deal a lot with the PRCA, because most jurisdictions will accept, um, either PRCA or ACCT, um, built to either one of those standards, um, or they require that it's built to ASTM for, um, for a municipality, but most insurance companies, um, that's where it is. And, I think, the main difference now, and what I see, now that we've been doing mostly, um, ASTM-style builds is that we build to ASTM no matter what the, um, jurisdiction requires, um, because, because for the most part, both, both of the standards are very harmonious, the ACCT and ASTM. Um, the difference, the main difference, is in the operational requirements. Um, the ASTM standard doesn't have any, um, real, um, language that, that goes to training and operations and so ACCT and PRCA are the, the overarching and highest standard for that.

M: So, um, is it, is it more about how to build the courses then, rather than how to operate them, as such?

B: Yeah. I think that's what... ASTM is more about building. They have, they have a few lines about, um, about the operations, but it's mainly how to build, um, how to design, how to build and then how to inspect to maintain it.

M: That's interesting, because it's almost as if it's, um, it's the job's done then, once you've built the course.

B: Um, that's the way they look at it, but they, they come from a realm of making amusement parks and carnival rides and most of those, once the ride's built, you, you teach the guy who, whatever his level of education might be, um, that you, you hit the green button to turn it on and you hit the red button to turn it off, and if something really bad goes, you hit this button and pull this lever and that's it. Um, and so, to transfer that over to something that has, that has such a guide or monitor driven, or facilitator driven role, and traditionally always, um, we don't just put people out there to push buttons. They're, they're there. They're responsible for a lot, including some higher-end rescues.

M: OK.

B: So, I think that's, that's the biggest thing and, and having, having a standard that holds that up as a higher regard and actually sets up criteria for certification?

M: Yeah. Do you think it would be better if they combined all the standards? Um, because... instead of having three or four different ones?

B: It would be, it would be really nice and that was one of the, one of the discussions... well, it's a discussion that comes up all the time, is, you know, what are the relevancy of all these other standards, when ASTM is being upheld in so many different states and so many different, um, jurisdictions that, that at that point what is the point? And, the largest point is talking about operations and about training operators, but to combination the other, the other parts of the, both the ACCT and the, the PRCA, even though they're, they're so harmonious with ASTM, is they're, they're written a little easier for lay people to understand. The, the way the ASTM is written is, you know, it references this other standard and then you go to this other section of the ASTM standard and read that and then that one references another one and so you're... it's, it's very off, shooting off in multiple directions and then coming back circular and it takes a long time to get through all of that and for a standard tour operator they don't necessarily have that, um, that level of time or access to that many standards, because it's... I think our annual budget for stand, standard purchases is something like, um, \$10,000, \$15,000. So, it's pretty high level of purchasing, just to get to where you can start reading them all. Um, so I think that, that's kind of in there is that, that, at least with the ACCT, they're trying to create something that's understandable by lay people that also works harmoniously with what the, um, what the regulators would like to see.

M: What do you think is preventing them from being combined... um, the three of them?

B: I think, I think, um, I think there's resistance from, um, ACCT and from PRCA to work together as much. Um, definitely between those two, because they've traditionally been rivals and they kind of all came to together and split off and... it was just... there's a lot of rivalry and a lot of arguments at different meetings between both sides. Um, so those two working harmoniously I don't, I think it's bad blood from history. Um, yeah, it's definitely... there's a lot of... they're both 'good old boys clubs' in some ways.

[Laughter]

M: Wow, OK. Yeah.

B: That don't get along together. Um, and then, with, with ASTM, we're, we're very, as an industry, we're very involved in the writing of these newer standards and in working with that, there's a group involved in that that is from the traditional amusement park side that is really pushing for our products to line up more with the standard of amusement park and by nature we don't. And so, there's a, there's a back and forth between the ACCT and the

PRCA and ASTM on how do we, we are having difficulty finding a way to meet every letter of every law that you're asking for and, and in some ways we feel that it is impossible to do that. Um, and yet they are a lot, they're, they're more steadfast in their 'it's all or nothing' statement, instead of adapting to fit this different model and different product.

M: Right. Sure, yeah. Because, they're coming from a different industry, so you'd, you'd have thought that they would arrive a little bit open minded to a certain extent.

B: There's some, there's some people that are, um, and there's other people that aren't and so, it's... we're still, we're still such a young industry compared to roller coasters that it's, it's a growth period and I think that as we move along we'll align more together and standards will probably become, um, just one set of standards. That'd be very nice, I think, for everyone. That'd be less confusing.

M: Yeah. So, in terms of collaboration, do you, um, does your organisation, do you collaborate with other stakeholders in the industry? As in, other builders and other operators?

B: Yeah. So, so we, we collaborate quite a bit. Um, and we have, um, members on ACCT boards and we have some members on, um, from our organisation, on the ASTM review committee. Um, so we, we take part there. We're sitting down with other stakeholders. Um, we sit down with several of the different state organisations and, um, stakeholders there. Um, we regularly attend different symposiums and, and gatherings of, um, just the aerial adventure industry and, um, put on, put on seminars as well to try and get everyone together in, in open discussion. Um, so I, I think that's a huge part of it and it's what makes us successful in the industry and what makes the industry successful as a whole. Um, and I think that, so we have our, our annual conference is coming up in February and there's a couple of... um, there's going to be some impromptu discussions, we're going to sit down with a bunch of different groups and discuss some of the risk management communication and maybe form up a committee that... shares all of the incident reports and those things so we can create statistical analysis.

M: So, um, OK. That actually, um, is one of my questions, um, is: whether it would be beneficial to create, um, an industry-body as such that just has the sole focus of, um, improving risk management procedures?

B: I... yes.

[Laughter]

M: Yeah?

B: Completely. I think, I think that is, that is actually, probably the number one for me, what the industry should be, all of the industry groups should be doing right now.

M: OK. Yeah, because that's essentially what I am looking at in my study. OK, so, you already, um, share, I guess, risk management knowledge and data with your, um, colleagues in other organisations then?

B: Yes. I mean, to a degree. There's, there is a lot of viewing of competition, um, and I think, I think in risk management, competition is, um, is bad for everyone, um, because it hides what the risks actually are. I think it's fine in how you mitigate those risks, that can be your own trade secrets in some way, although there's not very many ways to mitigate risks, so I think everybody will come to the same ideas at some point. Um, but knowing what the risk is, I think, is the biggest thing and I think that's where we need to be more open and more sharing and it's not necessarily there, because there's, there's a lot of, there's a lot of builders within all of the different industry groups, ACCT and PRCA who have... they started out as rivals and have had 10, 15 year rivalries where, when they get together they can, they can converse, but they hold all of their, what goes on in their businesses as secrets, because somebody might figure out how they're doing it and want to copy or take whatever their idea is. And that's more of a personal feeling from associating with those guys, hanging out with them at different gatherings and seeing them. Just how much they're willing to share at what point.

M: So, um, is that... I mean, do you think then that an incident at one park would affect the rest of the industry, is that, is that why you have those opinions?

B: Yeah, I think, I think any, any, um, any incident at any park can be, um, a major educational for anyone in the industry. It also, due to press, or, you know, whatever those, um, outline, just, um, potential customer perception of the industry, because of an incident is bad for everyone. Any incident is bad for, for everybody, for every stakeholder in the industry. Um, economically it raises our insurance rates, because, for the most part, here in the States, we are all linked into the same few insurance companies.

M: Oh, OK. How many? Is it just a handful of insurance companies or...?

B: It's... yeah it's just a handful for the most part. I don't know, I don't deal with that side so much, so I don't know how many.

M: OK. So, um, what, what do you think are the benefits, then, of collaboration. Of collaborating?

B: I think we, we reduce, we increase our knowledge base so we know more and, and we can statistically analyse what our risks are and how great those risks are and it also allows us to... um, to forecast then, with a greater knowledge base on what, what could happen in the future and what the side-effects of certain mitigation practices would be.

M: OK. OK. Um, so, I mean you talked a little bit about the level of competition and the long-term competitors and so on, so what do you think, um, is required for collaboration to work in the industry?

B: Well... when... so I, I had some time with the, um, [intentionally left blank] risk management committee. I did [intentionally left blank] there for a little bit and, um, we would anonymously, so we would fill out a questionnaire with, um, categorising our incidents over a year and then we would, um, after we categorised all of that we would, um, we would also, um, redact our incident reports so that it couldn't be identified by location or by people involved in the incident, but still maintain, um, all of the communication of the incident, and this was only for incidents of a certain level. Um, most of them involved, it, for us it was any incident that involved, involved medical care.

M: Right, OK. Yeah.

B: So that, that would be where I would, I would see a huge point of collaboration and what, what a risk management committee would do with us is, is with our industry right now, is collect that data and collect what was being shared, um, and then put out a report that not only allows people to, to view a lot of those incidents, um, especially the major ones, so that, um, the, the whole industry can do a after-accident review of, you know, this is, this is what the incident was, this is what the response was and how can we, you know, improve our response and/or mitigate the risk?

M: So, um, and that would also, because obviously, trust is, um, a huge thing in, um, collaboration, and I guess if you did it anonymously that's not necessarily as important, I guess. But, yeah. OK. Because, that's one of the things that I've been looking, is, um, you know, when you collaborate, one of the barriers, I guess, is lack of trust and, my feeling is that that's perhaps also the case in the aerial adventure industry, because, like you said, they're competitors and have been competing for 20 years or whatever.

B: Yes. And, and I think... I see it in Costa Rica as well when I've been down there, that, that a tour will ask me to inspect their tour and give it the ACCT seal of approval. [Coughing]. And they do that and then they want that, because none of their competitors have it, so it gives them that next step up. So, if they can say they're safer than their competitors, because of whatever reason, it gives them market share and market-ability. So, I think that that's the fear with operation, operators, is that, you know, somebody will say that they're less safe.

M: Yeah. And I guess, also, given that a lot the, um, businesses are small-to-medium enterprises, um, how do you believe this may affect collaboration within the industry?

B: Um, I think, I think taking the time to, um, compile any of the paperwork, um, I think that, for smaller-to-medium size businesses, they're already, um, leveraging their, their time and their, um, their allowable business expenses on other more profit-making ventures that, any time that they would see as, you know, is it really necessary to spend this time and this money on compiling and communicating? Because, I'm in my world and I need to, I need to make this business work. I think that's one of the drawbacks for that.

M: Yeah, the reason why I ask you is that, so one of the people that I spoke to said, for example, um, with the ACCT conference, for example, they, they can only afford to send one person, um, every year, and so, in terms of collaborating, um, that's obviously a difficulty, because that person is only going to do so much, um, over those 3 or 4 days.

B: Yep.

M: Um, do you, do you think that, um, I guess, doing, I don't know, maybe more conferences or doing it more online, um, trying to encourage other people that way to, um, participate as well, would that help?

B: I think, I think so. Um, any way that, that is, um, low-cost and the lower amount of time that it requires to share the data and the easier it is to get involved. I mean, human beings are inherently lazy. We will, we will find the easiest way or just not do something, because it takes too much time or it's too difficult. So, if it's extremely easy to do, we're more likely to do it.

M: OK. And so, going back to the safety committee, how, what role or how important do you think leadership would play in getting this, um, up on it's feet, I guess?

B: Um, I think, I think that it, it... so, I think that as an industry, if, if the board members of the ACCT and the board members of the PRCA put it as a high priority and communicated that out, I think there's enough people, um, at every company and most of the larger, most successful companies are already, already have a very strong risk management program. So, I think they would be, they would just get right on it. They would be part of it and back it, um, as long as it did, it was, um, inexpensive and easy to do.

M: And how would you like to see it implemented, [intentionally left blank]?

B: I like, um, well I think that having a, um, a committee of some sort, branching across the entire industry, that would review and compile any, any communication there and act as the, the central communication hub to not only invite people to join in, join in the communication, but also disseminate that communication out. And, and traditionally with the ACCT at least, that's been, um, it's usually a volunteer, um, kind of, grouping. People volunteer and... it's done... it's been pretty successful with that. So, I think if there's the ability for. Um, and then I think, um, teleconferencing, um, and Skype and good website to communicate things and invitations to be part of webinars and communicate some of that stuff and share information, not necessarily to share solutions, because that allows, that allows people to still feel pretty strong about, you know, "we have our business. We've created our solutions. If you are really interested in our solutions, we'll sell them to you that's fine". Other people will give away, you know, easy, but when it comes to technology of, like, "I have this new thing, I'm not going to give it to you, but I will sell it to you". Um, that's fine. That works. Whereas, you know, "we found that, you know, simply by changing from these knots to these knots reduces the risk to the participant". I mean, that's, for me, becomes a, um, a freeware, a free shareable, because it's good for, it's good for the industry, it's good for everyone and it doesn't cost anybody any money, anybody can do it. So, it's having that central hub and having... but having, having leadership from the different organisations, major organisations, buying in and also championing it and really moving people forward on it.

M: And do you believe, do you believe there should be some, um, well do you believe the industry collaborating with public agencies on risk management, would that be beneficial as well?

B: I think, I think it hugely is. Um, they, most of the public agencies are trying to regulate public safety, um, so they're trying to figure out how they can require people to manage risk and I think we, we spend a lot of time with local state agencies, city and municipal

agencies to discuss how they're implementing regulation and what the goal of it is and how, you know, what the spirit of that risk management is and how, how we can comply with that, um, and make it effective and easy to use for everyone and so I think that's a huge part. They're a major stakeholder as well, um, because they're mandated, they're commissioned by, by, by... um...

M: The people...

B: ...um, by their municipality, um, to protect people. And so, we're all trying to do the same thing, um, just in slightly different roles.

M: Um, and do you think that, that there should be some form of, through the safety committee, if you collaborated with public agencies, do you think there should be some form of, I guess, control in terms of making sure that what this safety committee puts out, or disseminates, that actually gets enacted?

B: I think so and I think that would be where, um, where a stakeholder meeting, so you know, the committee is, is put into place, they write drafts of policies and, and systems and then [coughing] the stakeholders that are actually involved in that region, or that those policies affect, would have that chance to voice their way in and kind of oversee that, so that, that the voices of the few are not speaking for the voices of everyone.

M: Yeah, for sure. And, do you... so I guess, in your experience as well in dealing with public agencies, um, do you, is it an, do you think it's an issue that some of these may lack industry experience as such?

B: Um, very much so. And it's getting better in some areas, I think. We're based in [intentionally left blank] and so we deal with the [intentionally left blank], um, companies quite a bit, or the [intentionally left blank] regulators quite a bit and at the beginning they, it took a lot of education from ourselves and, and our peers and other stakeholders here to get them to, to understand what it all is and what it all means. So, now they're, they're relatively well educated. Um, there's still some times where the stakeholders have to spend quite a bit of time at the stakeholder, stakeholder meetings to, to then educate with, you know, what our perspective of how, how their new regulation affect us.

M: But, so they've been quite open then, in your experience, at least, open minded as such?

B: In, in most areas. Um, there's, there's, um, there's one or two states that are less open minded and actually seem like they are forwardly attacking the stakeholders in, in the region, so...

M: Oh, wow, OK. Yeah, that's an interesting approach.

B: Yeah and some of that is, is, is my bias from having to deal with them quite a bit.

[Laughter]

M: Yeah, OK. No, that's cool. Now, so, on the safety committee what areas do you believe they should be focussing on? Do you think it should be, like, an all-inclusive or should it be, you know, just operations or just building the courses?

B: I think that, um, in course design, um, and installation standards, um, we do have quite a bit that have, um, that have that regulated and have that locked in for what... how that has to happen with ASTM. However, I think in their continued focus on that, because they dictate more generalities and what we see in the industry has things that are installed different ways. We find, um, we find different little, um, small issues that happen and I think that installation... incidents due to installation, um, that is a major part. Um, but predominantly, what we're looking at is the after-effect, because we're, we're concerned about the risk for the operation staff and the participants, that's, that's where we end up for long-term. And so, all aspects lead up to managing that and mitigating that risk for participants and, and operations staff.

M: Wow, OK. Wow. I've just got one more question, [intentionally left blank] and it's basically, so going forward, um, what do you think the, um, state of the industry is going to be like over the next 10 years or so?

B: Um, I think the industry is going to grow quite a bit and continue to grow. A lot of, a lot of areas are going to have been [coughing] built out with their original installation, so we'd be looking at upgrading and changing things and bringing in or, or just replacing, um, facilities will just replace all of their items with whatever the, the new shiny, um, more thrilling toy is. Um, but a lot of it will be going into upgrades and then, with the prevalence of tours and, and amusements and aerial adventure courses out there, we're going to see an increase in participant days and with that we're going to see an increase of incidents. Because, it's a pure matter of statistics. The more days you have people out and the more time it runs, the more incidents you'll have. Um, I'm hoping that with that we'll start to mitigate it and the number of incidents that we have are smaller, or the number of major

incidents we have are smaller and that we're dealing with a lot more minor incidences, sports-related injuries mainly, of twisted ankles and...

M: Well, they're always going to be there, aren't they?

B: Exactly and that's, and that's where we end up with and there will be things that are not related to the activity itself, um, of, um, you know, cardio pulmonary issues, people having heart attacks on the course, um, you know, allergic bee stings, those types of things. And I, I hope that that's where, because we'll, we'll have managed our risk to our best ability that, in the next 10-15 years, you know, because of user days, we see a lot more of those incidents and, um, the rescues that are involved with that and less incidents where there was a 'operator error' and someone fell from height. Those, those are the incidents that we should be able to mitigate to the point of a lower level than we have now. Eradicating them completely is, I mean, I've been in the construction industry for 20+ years, 21 years actually, and, um, no matter how good our training is, no matter how good everything is, the, the fall protection devices, there's still a good number of, a high number of fatalities every year from falls from height.

M: Yeah. I guess, it's slightly the nature of the beast, isn't it? You know, to a certain extent.

B: Yep.

M: OK. Wow. Well, thank you very much, [intentionally left blank], that's all I have.

B: Excellent. Thank you, sir.

M: Do you have questions at all for me?

B: No, I think that, that, um, I think that it's wonderful. I really... I think it's great the direction you're going and I look forward to seeing what comes of all this.

M: Well, thank you very much. Everything, if everything goes well I should, um, I should be publishing this summer, so, um, but obviously... well I hope to graduate this summer as well, so.

[Laughter]

B: Yeah.

M: Yeah, hope to, right?! So, um, it will be good. Because there was one study that came out on the industry last year, which I think was, um, a little bit, it wasn't so good, because it talked a lot about increases in accidents and so on, it didn't really take into effect that the

industry has grown a lot in that, um, range of years as well. So, hopefully, I can do a better job, anyway.

B: Excellent, well I look forward to it.

M: Thank you very much, [intentionally left blank] and have a lovely Christmas!

B: Alright. You too, Marcus. Bye.

M: Bye.

Call ended.

Participant 6 Conversation

B: Participant M: Me R: Receptionist

R: Hello, [intentionally left blank], this is [intentionally left blank].

M: Oh, hello, [intentionally left blank], is, um, [intentionally left blank] available at all please?

R: Um, he might be. May I ask who is calling?

M: It's Marcus.

R: Marcus?

M: Yeah, Marcus Hansen. He's expecting me.

R: OK, Marcus. Hold on a second please and I'll transfer you through.

M: Thank you very much. Thank you.

R: You're welcome.

[On-hold music is playing]

B: Hello.

M: [intentionally left blank]! It's Marcus. How are you doing?

B: Hey, Marcus. Good.

M: Good! Long time, no speak.

B: Good, good, good. Yeah. So, you're, you're moving along, huh? You've got another project? So, you're going for, um, was it PhD now?

M: Yes, indeed. Yes. Yeah, all being well, I should graduate this summer.

B: How exciting!

M: It is, yeah. Well, a bit nerve-wrecking as well, but, um, it is yeah, it is. How about you guys? How are you doing?

B: Yeah, we're doing great. Yep, yep.

M: Good. Good.

B: You know, this industry keeps growing and we, kind of, it at the right time so it's been going real well.

M: Are you still travelling all over the world?

B: Um, I'm not so much anymore. I think that, kind of, got a little bit tiring on the family, but I have people that work for me that do and, you know, um, I mean I have... this last year I was over in England actually with [intentionally left blank].

M: Oh, yeah?!

B: And, um, they had a big [intentionally left blank], you know, they're making some big deal out of it.

[Laughter]

B: And then, um, Switzerland and, and Italy. So, yes, I did travel a little bit.

[Laughter]

M: That's good to hear, [intentionally left blank], that's good to hear. Um, listen, thank you very much for, um, um, opting in, for taking part in my study, um, very much appreciated.

B: Yeah, no problem.

M: Um, so, [intentionally left blank], um, I am, I'm recording the call and, um, at the end of our call I'll send a copy of the recording to you. Um, I'll use the recording to transcribe the interview and the once I've transcribed it, I'll send a copy of the transcript to you as well, um, just so you know what's going on. Um, yeah, how does that sound? OK?

B: Yeah, that sounds great.

M: OK. Um, obviously, like I said in the email as well, um, your identity is all confidential, um, but as we talk, you know, feel free to mention, um, your company name and so on, I'll just edit it out. Um, it just makes it a bit more natural, the conversation, if you like. OK?

B: Yeah.

M: OK. Do you have any questions before we start?

B: No, not at all.

M: Great. So, um, please tell me about your role within your organisation.

B: Um, I'm the president and owner of, um, [intentionally left blank] and, um, um, and I have [intentionally left blank] companies, um, that, um, that I'm involved with within the, um, adventure course industry.

M: OK. Um, OK. Do you build and operate or... how does that work, sorry?

B: Yes.

M: Oh, you operate as well?

B: Yes, so we're operating, um, you know, when... we had been operating even before we got involved with [intentionally left blank], we had a, a course, you know, courses that we had been operating, but we were doing more team building-type programs, you know, for over 15 years and all. So, um, but then we've since created a, a, company called [intentionally left blank] that, um, operates adventure parks.

M: Oh, that's exciting. I didn't know that, [intentionally left blank]. Cool. That's really exciting. Um, great. And so, um, how long have you been in the industry, involved in the industry?

B: Um, let's see... probably about 30 years.

M: OK. And, um, you have both, I think you just said, actually, you have both educational and commercial operations, then?

B: Yep.

M: OK. So what, what do you think is the key attraction to aerial adventure parks?

B: I think people like to get high.

[Laughter]

B: You know? Because that's what it is. People... you know, I mean, we're all on the ground and, you know, the adventure parks and challenge courses, ropes courses, all that, provide people an opportunity to do something radically different and that's being up in the air. And, you know, doing it in a way where, you know, it's managed risk, where, you know, like if you climb a tree or get up on the edge of a building, you could fall off and get hurt and we provide the opportunity to do some fun stuff way up in the air.

M: Mmm. Mmm. And, um...

B: ... Because of the safety systems and the way it's designed.

M: Yeah, because, I mean, it's changed a lot since I've, since I was in the industry, just from doing my research, there's so much stuff out there now in terms of...

B: Yeah, I think the technology is really kind of changed, but it's very similar too, I mean, really the intent and the way people engage with it, you know, and, and why people like it. I mean, you know how... you have all these customers and even the staff... it's a great job, it's a great industry.

M: Yeah. So, I mean, when we left, right, Edelrid Smart Belay was kind of up and coming, but now it's, you know, Bornak, Clict, um, everything yeah.

B: Exactly, yeah. There's a lot of, lot of technology that's, kind of, coming into the market place to, um, you know, change, you know, provide that concept of experience and risk management. Um...

M: Yeah. Yeah. So, I went to IAAPA, for example, in Orlando this year and, um, I was quite surprised to see how many, um, there were about 6 or 7 builders, or ropes course builders there as well and they were showing off all the different elements, um, in terms of different belay systems and so on. So, that was really cool.

B: Yeah.

M: So um, [intentionally left blank], um, obviously we talked about people like to get high and so on, um...

[Laughter]

M: [...] so, what role, how important do you think this, um, thrill seeking or risk taking aspect, um, what role do you think that plays in the overall attraction to the, um, adventure parks?

B: Um, what do you mean by, "The role that thrill-seeking and risk taking makes"? I mean, people like to feel alive and, and, that experience of having your life somewhat on the edge, you know, I mean that's why rock climbing and stuff like that has such a great appeal because, when you're doing it's exciting because, you know, you're on the edge and you're, you're doing something very tangible and physical and, um, you're very conscious and, and aware on the line, while you're doing it. I mean, a lot of peoples' lives are pretty mundane and, um, you know, every day is the same, plodding through, but when you go out and do something engaging and then it's, you know, it's on the edge and exciting and, you know, there's an adrenaline rush with it. It can be addicting, really, I think.

M: Yeah. For sure. I think so, as well, I mean, that's, that's why people want to keep doing the Giant Swing, right?

[Laughter]

B: Yeah. Or you see the thrill seekers that are out there doing the next big crazy-ass, because it's, you know, it's... it's got a lot of adrenaline and a lot of excitement. Like, excitement seekers are, you know, probably just as addicted as anybody else on certain things that feed that adrenaline rush.

M: Yeah. I guess, because, the... as an activity, or, um, there is this strange relationship between, with risk isn't there? Because there is... you want people to feel like they're taking a risk, but at the same time you want it to be a, an illusion of risk as such.

B: Yeah, and I think that, that's probably where it's magic is, you know, and as providers of those products and services, you know, can we create a very risky experience for people that, you know, yet it's not really risky, it's actually pretty safe, so the idea would be 'perceived risk', is a term that people use, it's perceived as being risky, but, the truth is it's not risky. Maybe you have some emotional risk in it, you know, you might be scared to the point where you're not happy, but, you know, most people like to be scared to the point where they're ecstatic and, um, you know, we just don't want people getting hurt doing it.

M: Right... so, how, bearing that in mind, how would you define risk?

B: Um... let's see. How would you define risk? I guess, um... um, it's taking a chance on something where the consequence could be painful. You know, taking a chance... it's basically, you're gambling, you're taking a chance on something and the risk and reward equation is the greater risk you're willing to take, it's because you feel the reward is that significant. I might gamble a bunch of money, because I think I'm going to get a great reward for it, but the chance of me actually winning, you know, are slim, you know, but I'm... I want that big reward. I'm willing to take that risk of losing the money or I'm willing to take that risk of getting hurt, because the reward of accomplishing it makes me feel excited and alive.

M: OK. Um, so what do you think are the, as an organisation, for you guys, I mean I know you have different organisations, but what are the key challenges you face in risk management, then?

B: Um, well, there's different places where you have to manage risk. One is on a corporate level, you have contracting and you have employee, you have governance and all these different things, where you have exposure, whether it's your people getting hurt, you hurting people, um, threats to your financial stability, um, you know, you're not managing a project correctly and losing money, losing your business, being sued, I mean there's so many places where, you know, you can be affected and hurt by the work that we do, because the work itself has risks to it, but doing that work is risky, because there's all these factors in it: the legal aspects are a significant factor. You know, we could end up being brought into a lawsuit, even though it's nothing we did, you know, um, just because we're an affiliated or known to be involved with a, a particular project. Um, so there's a lot of exposure in the work that we do and that means that we carry a lot of insurance to help mitigate that exposure and risk for ourselves. We, we take time to make sure that our contracts are set up correctly, so that we protect ourselves. Um, we have release forms that people sign so that they acknowledge the risk involved in the activity that they're going to be doing. Our employees sign agreements knowing and acknowledging that, you know, doing this work has risk. So, the whole concept is being aware as much as possible and informing people as much as possible of all the risks involved all along, while we're trying to mitigate and limit the risk, the actual risk that's there, and you do that through good design, um, education, training, use of technology.

M: Right. OK.

B: And using smart, hiring smart people, you know.

M: Yeah. Yeah, I mean, people is a big part of it, isn't it? I mean the HR side of it.

B: Yeah, I mean, it's very rare that the structural failures are designs. Almost always, you're, your problems within, um, you know, where you see a big portions of the accidents and, and injuries and deaths out there is a lot more user-based..

M: So, how do you monitor...

B: ... not just user-based, but, but, you know, staff or somebody's made a mistake, you know.

M: Right. So, how do you monitor that your procedures are being followed throughout the organisation?

B: Say that again.

M: How do you monitor that your risk management procedures are being followed, um, throughout the organisation?

B: Well, you have to monitor it. You know, you secret shop things, you know, you come in and observe, you train your staff. I mean, you too have to trust too. I mean, if you've hired smart people and you've given them good tools and training. I mean, we try to be very deliberate about who we hire. We're not just picking anybody off the street, because we need a warm body. We want people that... you know, we want people that, that can think and reason and, and assess and they're making judgement calls along the way and, and if we realise that that's not the case, I mean, we can't use them. And so, there's a vetting process with that too. You know, there's different levels of risk that people are in involved with. You know, I don't bring a brand new person into the company and have them start training and go to the most complicated situation and, and be responsible for, for a major, you know, certification program that they're not really prepared or ready to handle yet. So, we're evaluating them, we're training them up and, you know, we don't turn, whether they're trainers for our company or employees that are delivering the services at one of our adventure parks, you know, there's a graduated aspect to, you know, letting them, letting them do certain things and, you know, proving themselves to do it.

M: So, what, um, what lines of communication have you then got between, I guess, you as the senior management and the lower-level staff, if you can call them that, um, in terms of you know sharing the knowledge on, on, in the field and so, on risk management.

B: Well, and that's actually a really important point, I think, is, how do you, um, you know, how do you, you know, have the people that are, basically, on the front-line delivering, whether it's the training or they're the operators on the course, you know, in that day-to-day environment, um, get the learnings and the issues that you see, contending that you have happen all the time, every day. Um, you know, having that within a process through reporting, through feedback, through staff meetings. You know, we have documentation and we have meetings and, um, you know, there's, there's an inspection of the course and there's a review of the program every day and that just builds up that, um, that, that amount of information. Um, so there's daily, kind of, real quick check-ins, there's weekly, um, you know, we have monthly and then, you know, we have annual inspections, we have annual trainings and, and, um, there's a type of continuous feedback-loop that we have incorporated, um, and that includes not just the staffs' opinion, but it's, um, user and guest feedback. And that user has many different relationships to the enterprises that I have.

That user is the people that come on the course and use it as a, a guest; it's the staff that we're training through my staff, right? We're training trainers; um, it's the, it's the customer who uses our product that we've built and construct. So, we want to monitor and understand and visit. Fortunately, when we inspect and train, we're going to... [Inaudible due to bad connection].

M: Sorry, [intentionally left blank], you're breaking up.

B: [...] I assume, you're referring to, I guess, I don't know your scope of questions or what you're really focussed on, but the adventure park operators and how we mitigate and deal with that, kind of, concept of risk is really through, through exactly what you're talking about, is communication and documentation and then, and then delivering on that, right? Making the changes or, you know, you know, extending the training or, eventually, addressing the equipment issues that are coming up or something structural on the course or the guest interface and user interface, because there's something that's going that we realise is a problem.

M: OK. So, how, um...

B: I mean that's down to the ground. Like, somebody going, "hey, did you know, over there there's a, like a, ditch in the ground and people keep, kind of, complaining about falling in or twisting their ankles". Well, like, OK, let's fill that in, you know. Let's fill it in and put grass over it so that's not a problem anymore. Because, you have more than just the vertical environment that you have to manage at an adventure park, as you know.

M: Right. Yeah. It's, um, from the ground and up, right?

B: Yep.

M: Um, so, how, how important do you think leadership is, um, in, um, effective risk management?

B: Well, it's everything isn't it?!

[Laughter]

B: [Laughing] without leadership then, you know, you just have a bunch of rats running around. You know, I... I think, you know, I look at it as management really. I mean, how do you manage something. I mean, overall, "yeah, I really like this thing, I want to put this up. It's called an adventure park and I want people to jump in there and have a bunch of fun, because it's fun and they like it". OK, well, then where do you go from there? "Well, I

guess, there's a bunch of harnesses and they can just put them on and get up there and good around". And, um, the problem with that is, um, the general public isn't really that smart. You know, they're not educated, they're not familiar, they're not skilled in an environment that requires that and what we're trying to do is say, "hey, listen, you're a person from the general public who watches television, who spends time on your texting and your cell phone and you're not necessarily 100% in shape and extremely adept at what we do in the vertical world, but we're going to get you up there anyway, doesn't matter. We want you to go up there and have fun". The problem with that is that, those people aren't capable of figuring any of that out or doing any of it. So then, that means we have to manage that whole thing and that is where it comes down to how well you manage your shit. And so, all that stuff has to be managed and, and, you know, um, all the way down through the chain of command, every aspect of that you want to do a good job with. So, managing it, and that obviously includes the leadership of the people who are, kind of, in charge of managing it, and then the people that are under them, the charges of managing it, all has to be organised, trained, facilitated, you know. It's a, it's a, it's a big bunch of stuff to deal with really. I mean, if anybody really understands the amount of work and all that going into these types of things, I wonder if they'd really do it? As you know, most people get into the stuff, because it's really cool and fun. Right?!

[Laughter]

B: It is. But, man it's a shit-ton of stuff to sort out and deal with, you know? And, there's always something going on and, you know, people can actually get hurt, which, you know, nobody wants that to happen, but, you know... and that's even if you're relying on technology, as you're fully aware, right? You put something up, you hope it works and sometimes it doesn't, so... it's a, it's a really cool industry, but there's a lot of stuff to it. And, yeah, leadership is huge. I mean, it's pretty much everything. Without management, smart management and everything we do, it's, it's just, really, anarchy.

M: For sure. Yeah. Yeah. I mean...

B: And I don't, I'm not saying I'm a good manager, I just like having good people around me. I mean, to me, personally, I just like to have fun. I'm still the kind of guy that really likes to make shit, cool shit and have a good time! And that's... so, I better have really smart people around me, you know...

[Laughter]

B: that are organised, that pay attention, that, you know, know how to count and, and can organise these things in a way that we do take care of our employees, because our employees are the most part of this equation. Without really smart, educated people, this stuff, it'll not work. It will be a failure... and, you know, I don't want to have anything on my watch, any company that I'm involved with or anything we're doing, where we're doing a bad job. That's just not what I want. I want, I want us to do an amazing job and so I charge all of my key people and what not, "we're here to do an amazing job, here. Not an average job". And, I'm not interested in being a sustainable organisation, I don't care about sustainability when it comes to the companies and things that I'm operating. I want to make profitable and exciting and engaged companies, that, that make money and do amazing work. And, so, I want to inspire people and we try and incentivise them through the way our employment, you know, models are set up. But, you know, I'm not smart enough to figure all that out, I just know what I want and so, I try and hire people and bring in consultants and all that, to help us become a better company so that the leadership and how we manage things can achieve those goals.

M: Well, they say that that's effective leadership, isn't it? Surrounding yourself with smart people, right?

B: Yeah. Yeah.

M: [Laughing] I don't think you give yourself enough credit, [intentionally left blank].

B: Oh, maybe I don't. I don't know. But, I do care, you know, I care about it. That's probably one of the most important things that I care so much about it. I won't be satisfied until it's better, you know.

M: Oh for sure. I mean, that's the way it has to be. If you don't care about things then everything else doesn't matter, does it?

B: It doesn't. It don't. And I've, we've worked with people and we've seen it happen where, you know, they, they don't care about anything but just, just the money, you know, just, "we just gotta make money, we're going to cut corners and do that" and it's like, at some point, it's like, "yeah, well, we can't work with you anymore". You know, it's not safe.

M: It's going to end badly, if that's your... if you go in with the right intention, then the money, the money will follow anyway, so...

B: Yeah. I think so.

M: Um, so, [intentionally left blank], what would you say the, what role or impact does risk management then have on the overall strategy of your organisation?

B: Well, it's huge, because that's what we do and in some respects, this idea of making available a vertical fun world, um, is dangerous and so, again, well if you start from the scenario of "hey I want to put this thing up, because it's really cool and I want people to have fun on it", it's so risky, right? It's not like I've got a big field out here and I say, "hey, all you people can go running around and just have picnics and do whatever you want and I'll charge you for it". You know, there's some risk in that, because they could step in a, you know, pot hole and twist their ankle, but, you know, mostly it's not that dangerous. I mean, most people can walk around without doing anything stupid, but, you know, once you put an adventure park up and say, "hey, here's this really cool thing, um, and, you know, I want you to go and have fun in it and, you know, we'll give you some stuff to do that in, you've accepted a world of very high risk. And so, you know, we can either choose to train these people, like insanely train them, and be like, "you can't go on this course until you have a month's worth of training or something", you know, or "until you become a high ropes expert", you know, or we employ technology that takes a lot of that responsibility and training away and just say, "listen, clip this through this and you'll be fine" and they're all fitted with their harnesses and the belay systems are there and then they can, within just basic training, you know, within half to an hour, they can go into this vertical world and move around and do some fun stuff, maybe even zipline, without getting hurt. Now, you still have to manage all that, and that's risk management, but you have choices to make and so any kind of operator out there, you're basically pitted towards this idea that if you're going to do this stuff to the general public, then you have some decisions to make. You basically choose between how much training you put into your staff and what technology you're going to use to deal with it. So, you could spend a ton of money on technology or, you know, you could train the hell out of your people. And now there's an equation in between there, right? I think, well trained people with good technology is your best fit, but maybe at some point it's just totally technology. You know, like they're saying you can go to a grocery store and go through the whole thing and not even talk to a person and you just go out with your cart and everything's paid for and charged onto your... your credit card and I mean I could see at some point, where people could just automatically put on a harness and they're good to go and, you know, you don't have staff anywhere, because nothing will ever happen. Now, I'm not excited about that necessarily, but, I mean, I could see that there is a possibility that something like that could happen. But, the

operators have choices to make still and that's like: what type of technology and the training of your staff, the humans that are operating it. Those two equations are a big part of how you make choices around risk management and how well that works and plays out at your facility.

[Heavy wind blowing in background, disturbing the quality of the call]

M: OK. Yeah. I mean, I'm, I'm... I hope it doesn't happen, that there are courses without any staff at all. That would be quite scary, I think, actually.

B: Yeah. And there's programs that are operating with very minimal staff. I mean, you know, Go Ape is one that's always kind of stood out in my mind. They claim to be super safe and all, but it always worries me a bit, you know.

M: Well, I mean, um, unfortunately they had that accident in the summer, didn't they?

B: Oh, in the US, yeah.

M: Yeah, yeah. For sure. And that's, you know, well you know, I think, you know, that might be down to them, you know, refusing to use anything like smart belays, right, because that probably wouldn't have happened if they'd used something like smart belays.

B: Exactly. Yeah. No, I mean, that's where you make a choice and say, "no, we're so married to, or wedded to this one approach, that we're not willing to look at what's out there in the industry as a whole and, I think, you know, you have to pay attention to that, or at some point, you know, they're going to be viewed as being negligent, or maybe grossly negligent, because they put people at risk without really knowing, or being willing to adopt the technology that's available to mitigate that risk. That's where you make choices around risk management, you know...

M: Do you remember when they came to the industry...

B: [...] the reality is [...]

M: [...] oh, go ahead. I'm sorry.

B: [...] risk management is that important that you're going to be held accountable to it if you don't make a smart choice.

M: Yeah. I think so, I think so, yeah. It's just that... it's a shame it had to... um, that conversation had to, um, you know, it didn't happen until, you know, something really bad happened, if you like. Um, but, you know...

B: Right, which is usually how shit works!

M: Yeah, I know.

B: You know, I look at the government, they... how regulation happens in the States, anyway, you know. Um, regulation kicks in, um, when somebody gets hurt and then everybody's worried about it. They don't start looking at the stuff before then, which, in most cases, it's not like I want them to come around and regulate everything, but, regulating after a situation means it's much more reactionary than, kind of, being a lot more thoughtful and planning, so that you have smarter regulation if you take your time to, to organise it, you know, more thoughtfully.

M: Yeah, for sure, right? Because, um, you know, if you wait until there's an accident, then there's pressure on the, on the people to, um, you know, put something together, like, in terms of regulation and, like you said, it's much more reactionary, it's emotional and so on. Um, if you did it without an accident then, you know, it's probably better chance that it'd be more effective regulations that came out. Um...

B: Yeah.

M: So, [intentionally left blank], do you guys follow specific standards, um, when you build or operate?

B: Um, we follow specific standards and then we're forced to comply to other standards, so...

M: OK.

B: The standard that we, we spend most of our time focussing on are ACCT standards. Um, but there is also ASTM standards and there's ANSI standards and there is OSHA standards and so, we often are, are working within jurisdictions that we have to comply to, say, ASTM standards that might be different than an ACCT standard.

M: So, it's different from state-to-state?

B: It can be different from state-to-state or, if it's on federal, like a fed [...] like a for [...] like the US Forest Services, for example, you know, it's a different jurisdiction. It's not, it's not regulated by the states, even though it is in a state, it falls under federal, um, regulations.

M: Oh, right. OK. So, so, how, um, how does, I guess, the state and the other stakeholders, like the, um, insurance providers and so on, how do they influence risk management procedures within, um, I guess, your organisation?

B: How, how, how do states do that or how do insurance agencies or what?

M: Yeah, how, how does the state and, um, other stakeholders, like the, um, insurance providers...

B: Right. I don't know. I would say that there is an opportunity for them to, that they could become more involved. What typically drives this is if a state or an insurance agent might say, "Well, we're not going to recommend" or "we're not going to say 'pay attention to or follow these standards, because we disagree with them'". I mean, it's possible, but it hasn't happened yet. I mean, there are, um, within ACCT, there is an insurance agent that, um, that come to the conference and talk about things and may give their opinion, you know, and are on a committee, so that is where that occurs. State regulators, I think, they're more, you know, they're reactionary, or they're paying attention, but they're not, you know, directly trying to get in there and influence... I don't think any of them have enough time, you know!

[Laughter]

M: So, you don't see, you don't see, um, you don't see them trying to influence, I guess when you build, for example, they don't come and ask questions or anything?

B: Mmm... well, no, they will, but they're just... and typically, states and municipalities are more focussed on compliance than they are of influence of standards. Now, and... you know, that's just what it is. Like, in Hawaii, for example, there was a death and there was maybe one or two other deaths and so they react and they got together and they were going to do this whole thing and then they finally realise that they can't regulate in an industry where, one: it doesn't have that many accidents and two: they, they couldn't afford to regulate it given that there wasn't that much of it going on and once they'd looked at how much was happening, um, you know, it didn't rise to the level of other issues they had going on in the state that had actually required their efforts in and around regulation. And that's typical. Even in the state of [intentionally left blank] where I am right now it's reacting to a death that happened [intentionally left blank], but the reality is that there's deaths that happen all over the state for different reasons, you know, like high school athletics or something, playing football or something like that. You know, it's just

that when a death or an accident happen or occurs in the adventure world, it's, it's dramatic, it's intense, you know, it gets front-page news and so, it becomes a reactionary thing, but, but, you know, the reality is on a proportional basis it's still a pretty good bet, you like, when people compare airlines. When an airline goes down and people, you know, die, it's a traumatic thing and everybody reacts to it, they still say it's safer than driving your car, right? I mean, that's what you hear. And that's true, right? I mean, I'm, I'm flying all the time and, you know, I feel fortunate, but most of the time it's pretty safe. Um, so, you know, we're dealing with that in the state of [intentionally left blank] where there's this reaction and, um, we're dealing with, but, you know, they're more interested in, you know, what standards are out there and how do they want to regulate to that standard, as opposed to saying that, "we're going to influence and change these standards", they don't have time for that. What they'd do is they'd come up with a system that they can regulate, which means that they're going to then send people out to, um, verify that you are meeting the regulations that they've created, so...

M: So they're essentially looking to the industry then?

B: [...] it's more compliance than it is, than, like, dealing with regulations, or dealing with standards and then influencing standards.

M: Right, Right. Yeah, so they're essentially looking, um, to the industry for... for guidance, I guess, essentially.

B: I think so. Yeah, they'd look to ACCT or ASTM or somebody out there to say, you know, "OK, how do we regulate this?"

M: Mmm, yeah. So, do, do you find that you have to, um, I guess in your experience, have you had to, almost, educate some of these, um, public agents?

B: Totally.

M: Really?

B: Yeah, you do. And some of them aren't really that interested in being educated, they just want to do their thing regardless, you know.

M: So, um...

B: They're the dangerous ones.

M: Yeah, so is that, I was going to say, "Is that an issue?"

[Laughter]

B: It is. Yeah. I mean, you just don't know what you're getting into, when you're getting into politics, you know, because you just have all these competing factors, like power, money, control, you know, political parties and, um, you know, um, it ends up being a process where you're not really trying to create a really good law, you know, that's going to do great for the industry. You're dealing with factions that are trying to influence for a variety of other reasons that have nothing to do with a good, a good, a good regulation for the industry and so then, instead of like coming together with stakeholders and trying to formulate a good regulatory format, you're fighting to protect the integrity of your industry, because there are people that just want to do their own thing, which is... could be deleterious to your, your industry, you know.

M: Yeah. Definitely... um struggle it almost. Um, so, how, how do you think an incident at one park might, um, affect the rest of the industry?

B: Um, it can be sensationalised, um, it, it could be an issue that people have to pay attention to, because, whatever reason the, the thing that occurred, is maybe a situation that, you know, we all figure out is a real problem that we hadn't realised. You know, I think, in most cases the user-error that plays out in, in a lot of problems end up being something that... the owners or the operators were not being as responsible, you know, as they could've been. Um, but whatever all this seems to play out, I mean, at some point it's the general public's reaction to the media's representation that drives legislators to react and whatever that groundswell is and how the media deals with it really will depend on how far that type of thing goes. It's politics, you know. It's not really about making smart or good regulations.

M: Yeah. That's the danger, isn't it, you know, once you start involving public agencies and such. Um, [intentionally left blank], do you collaborate with other organisations within the industry?

B: Yeah, I think so. Um, you know, most of that is industries that use that like the American Camping Association, YMCA, um, there's publications that are happening in our industry that we are involved with or collaborate with. I guess, is that what you meant?

M: How... yeah, well, I guess, in terms of, I guess, the risk management, you know, information or knowledge on risk management and so on, that you learn, um, through

operating or building courses, do you share that with your... essentially your competitors, or is that something you...

B: Yeah, I think so. I mean, that's what really the ACCT provides, is that forum for sharing of information. I mean, I think that's how our industry's kind of grown. There's been this co-competition or collaborative sharing of information when it's helpful for the industry. You know, and, um, it's really hard to do something and people don't notice it anyway. Before we know it, we put something up we think and we think it's kind of unique, other people are already sitting there copying it or doing it. So, it's... it, it really happens very quickly, you know.

M: Right. Is, um... so do you think, um, so the main collaboration is really through the ACCT.? Is that through the conference?

B: Yeah and then, and then the associating through the committees and, and what not.

M: What do you see the benefits are of collaborating, then?

B: Well, I mean, you learn from each other. It's, it's, um, it's a greater collective consciousness that's brought to bear on important issues that, you know, I might have a, a perspective or an expertise in it, but it doesn't mean I know everything about it, and I think the more people with backgrounds and experience that can contribute to the improvements and conversation is good.

M: Yeah. Do you... how important do you think this is? To share the... I guess, and particularly in terms of risk management, because that's essentially what my PhD is about, right? So, how important is it to share this knowledge and ideas with the other stakeholders?

B: I think it's really important. I... I don't know what percentage to put on it.

[Laughter]

M: No, that's alright, you don't have to put a percentage on it.

B: Right. I mean, I think it's, it's how we all learn and grow. You know, there are peers in the industry that I, I have a lot of respect for and, and I know I can learn a lot from and I want to be a part of, um, of helping them out and I know that they can help us out, so...

M: What, what do you believe is required for collaboration to work in the, in the industry then? I'm thinking in terms of mind-set and skillset and so on?

B: You were thinking in regards to what now?

M: Um, mind-set, so, um, I guess, do you believe, for example, that trust is required? And so on...

B: Oh, right. Yeah, I think so. I mean, you're never going to have anybody be on the same page or you've got people in the industry that you don't trust at all, because of how they go about doing their business and how they've treated you or others in the past and... but there's a, there's a pretty strong network of companies or vendors in this industry that I have a high level of trust and because we have the history, you know, we've developed that over years of a relationship. Um, there's some that I don't, because I've had that same experience and I've, I've not had a good experience with them, you know, and given that...

M: Yeah, that's why I asked the question. Yeah, because it seems that one of the things I've come across so far in my data gathering is it seems, you know, some people that have had feuds, if you like, spanning back, going back, you know, decades or whatever, and for that reason they wouldn't talk to that particular person, for example.

B: Yeah. I mean, maybe it's been a bad relationship, you know. I mean, I can't speak for it completely, but I would say that, um, you know, it's, it's important to have good relationships, right?

M: Yeah, for sure. So, do you, do you... but, you still feel that there are, um, that these requirements for collaboration to work, they do still exist to a certain extent in the industry?

B: Oh, sure.

M: OK. So, in terms, I guess, also, because a lot of these, um, stakeholders in the industry are small-to-medium enterprises, um, time and finance is, is often issue to a great deal of them. Do you think that um... how do you think that this may impact collaboration within the industry?

B: I guess, rephrase that or say it again?

M: Yeah. Sorry. Um, so with a lot of operators and builders being small-to-medium enterprises, how do you think that that might impact collaboration, um, in the industry?

B: Right, so how does size affect it, because maybe they're slightly more struggling than others, you know, that type of thing?

M: Yeah, time-wise, they may not have the time, they may not have the...

B: Timewise. Yeah, I think that that plays a factor for sure. I mean, there's a part of me that feels like within the ACCT there's a lot of those smaller operators and they seem to be always demanding, you know, help them being educated and they, they don't want dues to go up, because they can't afford it and at some point you have to, you have to, you know, pay for what's going on in the association, and you have to contribute too and if all you do is just sit there and learn from everybody and you're not really contributing and you're, and you're asking for all this stuff all the time, because, basically you can't get your shit together...

[Laughter]

B: [...] which is, you know, there's a portion of them that do that. I feel like, you know, "forget it man". And, I'm sorry, "I'm not here to drag you along of my coattails. I mean, if you want to hang out, that's fine, but, you know, don't ask me to do a bunch of stuff for you. I don't mind you learning or being a part of this. I mean, I don't mind a bunch of people at a party, that's fine, but I don't want to have to sit there and keep trying to nurse people along neither. I think there's a certain quality, quality issue there, reference to the people doing this work, and so, don't be in the business if you can't survive and grow in it. And, um, so I think there is that part that happens and I think, only through time and relationship can you, um, know who those people are and how it works. I mean, it's just like anything, you know, you get in relationships, um, you date people and at some point you find somebody you want to marry, because you're in love and there is trust to build on that hopefully and it's the same with the vendors in the industry and there's some that are good collaborators and are supportive and there's some that are takers and don't give, um, you know...

M: Yeah, but you've both got to bring something to the table, right, so...

B: Yeah, contribute and it's great and if not, you know, and we definitely have that, you know, within our organisation and I think ACCT probably needs to do some work and cleaning house a little bit and, um, improving its quality control, because there are, you know, a portion of vendors who are kind of that way.

M: OK. Um, can you elaborate on that, [intentionally left blank], sorry? In terms of cleaning house.

B: Um, well, I mean at some point you have, you have to have a standard, right, in reference to the people that are, that are credentialed in the industry saying that these are vendors who provides these products and services, but some of these vendors are, you know, maybe not quite up to the high quality level that I would like to see.

M: Right, OK.

B: And so, right, but yet, they're still riding on the coat tails saying, you know, "I'm a PVM" and it's like, "yeah, but what kind of PVM are you really?". You know, "are you doing that level of work or are there problems with the work you're doing or how are you dealing with your clients and all that" and, you know, at some point you go, like, well maybe they're not the best reflection for what the organisation represents and so, that's where, at some point, you have to have a, not only do you have a program where people are brought in and reviewed, you have a part of that program that says that, "maybe you're no longer in it", right?

M: Mmm. Yeah.

B: Maybe you have to leave, because you're not doing a good job.

M: So, how do you become a PVM?

B: Um, well you, um, you apply and, um, you, um, go through a review process, you know, and they look at your, your work and, um...

M: So, there is some standards in place, but... perhaps they don't do it afterwards, after you've actually become a PVM, they just let you leave... let you go, as such?

B: Yeah, I would say that, at some point, you know, there's a lot more forget and understanding than maybe I'm comfortable with, you know, in certain scenarios, you know, I'd like to see a little more scrutiny in put into the equation and, um, and, you know, that might be the difference between me and how I would run the ship compared to some of the others. I think, at the beginning of ACCT was a really cool organisation, it was very caring and trying to help people getting better and you can do that, but at some point you're helping people get better and, um, but then maybe you have to say, "maybe you haven't gotten better enough", you know. Like, "I'm sorry. You know, it's just not working, or maybe you're not working hard enough or maybe you just don't give a shit, I don't know what it is". But, I mean, I, I think there has to be a point where you say, "yeah, OK, you've been given chances, but you're not, you're not doing it yet, so, come back when you get it", I guess.

M: Well, yeah, because. Because, essentially, you're...

B: That's not a huge problem. It's a concern and it is, there are concerns around that, but, um...

M: Yeah. So, I mean, one of the things that I've come across is that it seems as though there are some people in the industry that are really keen on working with each other, it sounds as though like you're one of those as well, but then there's a huge section of the industry that, that really keeps to itself. Um, so how do you think, um, you can motivate people to, to, to really, you know, join the table, join the discussions?

B: Um, well that has to be facilitated. You have to reach out, you have to do surveys, you have to ask for it and, you know, in some respects, you have to demand it. You know, "if you're going to be a part of this organisation, you need to be involved", you know, make your point clear. Get, you know, contribute.

M: Do you think it would be beneficial, um, to create an industry-body with, with the sole focus of just focussing on risk management, or improving risk management procedures within the industry?

B: Could be, but I mean, I, I think there are, there are types of things, you know, that is, um, I mean that could be something, you know, might fall under ACCT, you know, I don't know if it had to be a separate entity or...

M: No, no...

B: I mean it could be.

M: Yeah, but it could be done by the ACCT as well, um, like a board underneath the ACCT as well.

B: But, yeah, as a risk management-thing, um, for the aerial adventure industry, sure. I mean, I, um... that would, um, you know... I think any time we could have something organised where it's, um, being thoughtful and responsible like that, I think that's probably a good idea.

M: How, how would you like to see it implemented, [intentionally left blank]? Or would you?

B: I don't know. Yeah, I mean, you have... I mean, within the US, I mean, we're, again, I think within ACCT there's, there's an aspect of, um, of having a way of gathering that

information, you know, is there a need a for it? If so, you know, what is, what is the data behind that? You know, how, how many, what is the risk management equation out there? You know, how many accidents and incidents are happening, compared to the number of users? Where, you know, so you want to have a survey and have a good data collection of, of the facts of what's happening on a, you know, local, state, regional, country, global level. I mean, that's an undertaking that it would be awesome to have, but you're talking about collaboration among entities and the cost of doing business to do that, so that would require, on an organisational level, a commitment from a lot of different stakeholders.

M: But, so is that something you'd like to see more of then? Some more data on, on what's going on in the industry, essentially.

B: Yeah. Sure.

M: Yeah. Because, I think it's the Adventure Park Insider, the magazine, they recently did a survey, didn't they? I don't know if you that magazine.

B: Uhuh.

M: Yeah. OK. So, in terms of, again, going back to leadership, when it comes to something like collaboration, um, or a collaborative arrangement, how important do you think leadership is in terms of ensuring that this becomes a success?

B: Um, I guess I'm not quite... you're saying "how important is leadership for a collaboration like that"?.

M: Yeah, well, so, I mean, yeah, you could use ACCT as an example, how important is it that the president of the ACCT is doing his job effectively. His or her job.

B: Well, I wouldn't that be the case for anything?

[Laughter]

B: You know, if you're doing a shitty job, not it'd suck, if you're doing a good job, it's great. So, yeah, I would say it's always important to have good leadership and that they're doing their job effectively, regardless, right?

M: Yeah. And, do you think...

B: Yeah, I mean at any point, any time, I mean, where would it be bad to do a good job in management?

[Laughter]

B: Yeah. Where would it be good to have bad leadership, you know?

M: Yeah. For sure.

B: I don't know. I don't think anywhere.

M: Yeah, it'd never be good. Right. Yeah. No, I get it, yeah. So, um, do you think that the industry, um, if you, in terms of risk management, if you were to do something like an industry-body, for example, um, would it be worthwhile collaborating with public agencies, um as well?

B: Sure. Yeah, I would think if you're taking on that role of trying to... because in some respects you're saying that there's a, there's a global interest in... I mean, because you want to have that kind of information, I would think, more globally understood and, um everybody wants good public safety, I mean I think that would be the intent, then, then having all agencies, basically, that's the term you used, stakeholders, I think you would have any and everybody that's affected or involved with something like that, be connected with it. Seems like a smart idea.

M: Yeah. And, do you, do you think it should be, um, because obviously at the moment it seems like it's all done on a state-by-state basis, do you think it should continue on a state-by-state or should it be federal or regional...?

B: Um, well, you know, I mean, I think that comes down to governance and, um, you know, what's the realities out there in reference to, you know, if I were king, what would I like? Well, you know, yeah, I would prefer not to have all these different, kind of, jurisdictions on how this stuff plays out, but it's, it's just the nature of what it is. I mean, it's like Europe, right? You've got this attempt at the European Union, but how unified are they really? You know?

M: Yeah, for sure.

B: I mean, right now you've got Brexit and all of that shit, because everybody feels like they're going to go at their own, because their own self-interests aren't being taken care of. I mean, it's just a... it can be a really complicated thing to have this really large collaboration. There's just so many things that come into play with it. I think the intent mark for sure and I don't, I don't see any problem doing it, but, you know, who's got the time and effort and energy to pull something like that off? Hell, I don't know. I mean, I

would say that it's a good idea and there's the European Ropes Course Industry and there's a lot of really good programs out there that are doing good work. Whether we could ever come up with a real, actually truthful global, not only standard, but a unified information management process, where data is shared and organised. I mean, we, we can't even get it, you know, ACCT, or even at our state level, any basic numbers. You know, I'm talking with the university professor here, locally, to see if he would help us, you know, do a, a basic, um, statistical analysis within the state of [intentionally left blank].

M: Really? That's really cool.

B: You know, I'm trying to get collaborative going, because I think it matters, but, I mean, when you're looking at these large efforts, you know. Yeah, I think it would be awesome, but, you know.

M: Yeah. What was the professors, um, verdict? Is it going to happen?

B: Oh, yeah, yeah, yeah. No, we're going to do it. He's going to help us out, so we're going to, we're start, kind of, working on that, get some of his students involved.

M: Oh, that'd be... that's amazing, that is. You know, like we just said before, I mean, we need more research in the industry, um, you know, on so many aspects, not just risk management, but everything, right? Um... wow.

B: Yup.

M: So, um, dud-dud-dud, so I mean, do you think that, in terms of risk management, should the focus be like an all-inclusive, horizontal approach, or do you, do you think it should, kind of, just of focus on the building of the parks, um, and then leave the rest? How do you... what do you prefer, [intentionally left blank]?

B: Yeah, I'm not sure I'm following you.

M: OK. So, um, well, um, again, I guess it goes back to that, um, the industry-body, or the ACCT, you know, would it be better if they focussed, you know... I'm trying to think here, how do I say this? Would it be better if they focussed on everything, um, which I think they do anyway at the moment, um, but, if they an all-inclusive approach to risk management or should they focus just on one section at a time, say, building a course, "this is how you do it, this is how you operate a course"... does that make sense?

B: Yeah, I think it... I mean you have to look at the history and how something evolved, you know. Um, if you look at something like AC, ACCT specifically, it evolved because there was

a concern that there were a lot of, there were a few different operators, or manufacturers of, of challenge courses, and everybody was, kind of, doing something different and there was no real standard that anybody following and, you know, finally realised, well maybe, maybe we ought to get together and talk about how, how this should be done, so that, you know, and I think the original concern was trying to avoid being regulated by... regulators, you know. And so, that effort of, you know, of, of the concern of trying to avoid being regulated by somebody that could ruin our industry and didn't understand it, was, was a huge driving force for, for the establishment of the ACCT, you know. So, it was, kind of a reaction and, um, a concern to that. It wasn't, like, "oh, hey let's have this comprehensive risk management strategy for our industry [inaudible]. You know, we need standards to, to operate under and that's how the whole thing, kind of, got started and developed. So, now, with the, with the complexity that's out there, this idea of a comprehensive risk management strategy, you know, I don't know. I would say that, um, we're looking at the right things when it comes to risk management, but there's a lot of things that businesses have within our industry that the ACCT doesn't address around risk management. Contracting and things like that, you know. I mean, there's a lot of place and opportunities for, even vendors like us, we might specialise in contracting, um, consulting, you know, make sure your contracts are set up right or you have exposure, or, you know, like attorneys will review release forms to make sure you have the right language in them. There's just a lot of different aspects and, you know, our industrial trade organisation focusses on the technology, specifically, and how it's being used, specifically, in the reference to the way standards are put together, which is, ultimately, you know, a risk management focus.

M: But so, the ACCT doesn't focus on that at the moment or?

B: No, it does.

M: Oh, it does? OK.

B: That's right. Yeah, that's the focus of it.

M: Yeah, I thought that as well, but I thought, I thought you were saying that... OK that's cool. OK, so I've, I've only got one question left, really, [intentionally left blank], and that's, I guess, going forward, where, where do you see the state of the industry going in the next 10 years? What's going to happen, do you think?

B: Well, I think, um, you know, it's just going to continue to grow and, um, I think people like, you know, they like, um, the physical energetic activity of what, you know, um, adventure courses represent, so I think it's going to continue and, um, with that, I think, will be the challenge of, of, um, how do we accommodate the, the activities and the fun that people are looking to have and also making sure that, um, you know, that the risk is handled correctly. I think ACCT will have a big role in that, you know, if it continues to improve and grow. Um, but eventually we won't, we won't really worry about harnesses and cables and all that. We're going to have these magnetic suits that people are going to put on and they'll just walk around in a, um, magnetic field and they'll float around like, like balloons, you know.

[Laughter]

M: Really?

B: No, I'm just making that up!

M: Yeah, I know. I'm just sitting there, like Iron Man or something like that. Yeah.

[Laughter]

M: Oh, [intentionally left blank] you had me there! I thought you were serious, I thought you were dead serious there. OK, [intentionally left blank], that's all I've got. Um, thank you very much for taking part in my study, um, that's, that's really great.

B: Yeah, no problem. Good luck with it!

M: Thank you very much, [intentionally left blank]. I was, I was hoping to make it to the ACCT conference this year, but with me graduating a couple months later, I've been told I'm not allowed to go, um, so, um, hopefully I'll be there in 2018 instead, um.

B: Right on.

M: Yeah, but, um, thank you very much, [intentionally left blank].

B: Well, yeah, good talking with you and good luck with your efforts there.

M: Thank you very much, [intentionally left blank] and, um, have a lovely Christmas!

B: Yep, you too. Take care.

M: Bye.

Call ended.

Participant 7 Conversation

B: Participant M: Me

B: Hi, this is [intentionally left blank].

M: Oh, hi, [intentionally left blank], it's Marcus... how are you doing?

B: Hey, Marcus. How are you doing?

M: I'm good, how are you?

B: I'm doing well. Hey, where are you, um, where are you calling from?

M: Um, well I'm calling from the UK, but I'm calling over Skype.

B: Alright. Excellent. How's things in the UK?

M: Um, it's getting pretty cold! Um, but I'm assuming it's probably the same where you are?

B: Yes, indeed. Yes, we get a lot of snow here in [intentionally left blank], so it's definitely feeling a lot like Christmas.

[Laughter]

M: Yeah, unfortunately we don't get snow, we just get, um, cold rain and cold wind.

[Laughter]

B: Yeah. Yeah. I've been to a couple different spots in the, um, in the UK, but mostly in the summer. It was really, really quite nice.

M: Yeah. Where've you been?

B: Oh, I've been to London. I've been to, um, Wales. I've been to, travelled a little bit outside of London. [Intentionally left blank]. And, um, just climbing and some gritstone and, um, yeah I really loved it.

M: Wow, yeah. I mean, Wales is lovely for climbing and, um, and so on. Um, probably some of the best spots out, um, in the UK.

B: Oh, yeah. That's for sure. So...

M: Oh, right. Well, um, wow, OK. [Intentionally left blank]. So, um, but, um, thank you very much for, um, taking the time out of your busy schedule to participate in my study, [intentionally left blank].

B: Oh, yeah. You bet. Well, I mean, I'd be happy to participate. It sounds like it would be very worthwhile and valuable, um, study that you're doing and, um, I would look forward to seeing the results – absolutely.

M: Oh, well, fantastic. Yeah, yeah, I mean I hope it's worthwhile as well. Um, I am, um, just so you know, I am recording the call, um, and basically it's so that, well first of all I'll send a copy of the recording to you afterwards, um, and second of all it's so that I can transcribe the interview, um, which I have to do to analyse the data that I am gathering anyway, um, and then I'll send a copy of the, um, transcript to you as well, um, so you are, so you know exactly what's going and what not. Um... Is that alright?

B: Yeah. [Inaudible]. Oh, yeah. Absolutely. That sounds totally fine.

M: OK. Fantastic. Um, but, again, it is, obviously, confidential, so even though a mention of, um, you know, where you work, or, um, you know, like your state, you know, and so on, I'll, I'll just edit that out of the conversation, so there aren't any identifying factors in there, if you like.

B: That sounds great. You bet.

M: Fantastic. Um, well before we start, do you have any questions?

B: Um, no that sounds... that sounds all good. Like I say, just fire away with any questions that you have and I'll be happy to offer my opinion. So... yeah.

M: Great. Fantastic. Well, um, yeah let's start then. Please tell me about the role, your role within the organisation.

B: So, basically, I've just come on, um, fairly recently. Um, I came on in May of 2016 as the executive director of the [intentionally left blank]. And, um, we are a trade association for the industry and we're a member association, so we have different member categories, we have individual members, um, stakeholder groups, um, we have, of course, our [intentionally left blank], our [intentionally left blank] who are designers, builders, installers, um, we have other organisational members. So, basically, as the executive director I oversee the staff. We have, um, 4 full-time staff and 3 part-time staff. We have a lot of volunteers, so there's a lot of volunteer management. I oversee the budget, the

annual budget, I work with the board on strategic planning, um, little bit, you know, even though we're not profit, um, so in the non-profit world the executive director wears a lot of different hats, you know, chief operating officer, the chief financial officer, the CEO, the director of marketing. It's such a [inaudible]... lot of different areas, right?

[Laughter]

B: But, overall, it's, um, a key position in the organisation, really working, um, with the board to carry out the, um, the strategic plan and the vision of the board essentially.

M: OK. Um, and how long have you been involved in the, um, in the aerial adventure industry?

B: You know, I'm newer to the aerial adventure industry. I've worked in the outdoor industry in a variety of capacities. Um, I've worked as an executive director and a program director for various, um, outdoor organisations. I'm sure you've heard of [intentionally left blank], which started in the UK, um, back in the 1940...

M: Mhmm. Yeah.

B: Um, I've actually worked as a professional mountain guide, so my, I have a lot of field experience, I have worked, um, as a challenge course facilitator, of course, going way back in my early professional career, um, so I bring a lot of non-profit management, um, experience, you know, working with budgets and marketing, finance, things like that, as well as just a good understanding of the outdoor industry and, really, you know, regulatory issues and what a lot of the industry is, kind of, dealing with right now. So, um, like I said, I started in May this year, so I'm still learning the organisation and it's, um, it's history a little bit and its main players and the stakeholders and board and really trying to get a sense of, um, just organisationally, how we can best move forward and, um, implement the strategic plan and really grow our organisation, because, for us, that's really an issue, right now. So, the industry has really exploded in the last, um, certainly 5-10 years, as you're probably very aware of, but we, we have not necessarily grown at that pace and I think there's a variety of reasons for that, so I am focussed on looking at how we can really grow the organisation.

M: OK. Just out of curiosity, how did you end up, um, yeah, at the [intentionally left blank], then?

B: So, I was previously with an organisation called [intentionally left blank], the [intentionally left blank] and I just happened to see the job announcement that was circulated, in last, um, I believe I saw it last December, so about a year ago, and, um, certainly have had familiarity with the organisation, I've known people who have volunteered, I've been to a few conferences in the past and I was just very interested in the organisation and this particular, um, position, I thought I'd be a really good fit, really bring some good strengths to the position, so I applied and went through the process and, um, was hired in, um, mid-April.

M: Oh, wow. Fantastic. That's brilliant. That's brilliant.

B: Yeah.

M: So, um, in terms of the organisations, um, that you deal with, or I guess your members, um, and so on, um, is it, um, is it mainly, um, educational, um, organisations or, um, facilitators, if you like, or is it commercial operations as well?

B: You know, it's a mix of both. I'd say, because the organisation started, um, in the late 80's early 90's by designers, builders and installers, um, that has remained our core. You know, those folks, by and large, kind of started out more on the educational used facilitative side of challenge courses, um, and then as the industry kind of evolved, now what we see is there are many more commercial operators, the so-called pay-to-play operators. They're not as interested in the facilitated experience necessarily. Um, it's a different focus, I think they're both very valid, both have a place. It's not like one is better or more important than the other, but I think we still do have a lot of the traditional-used, you know, those might be the universities, the camps, um, the operators who are focussed more on the leadership, teambuilding aspect of, of using their particular, whether it's challenge course or zipline, um, canopy tour or whatever, for different things, for different ends. Um, but we do have, you know, a good mix in our membership of, what I'll just keep calling, the traditional use, um, folks and the commercial operators and, certainly looking at it, um, that's where a lot of the growth is at, it's on the commercial side. Certainly in the last 5 to 8 years.

M: Yeah. Yeah, that's what it seems like, um, I saw a study that there was, I think, something like 300 parks or something like that. Um, just on the commercial side, which is, um... I think it was 260, sorry, I think was the exact number, which is quite incredible in such a short space of time.

B: Oh yeah. And, and I think that number is probably fairly low. I think there's, um, that's one thing we could do a better job of, as a trade association, one thing I really want to focus more on is just getting better data. You know, how many operators are out there, how many, you know really get a sense of what different people are doing, where are they located, their, sort of, um, gross revenues, um, who they serve, who's their demographic, um, you know, all that kind of information that would be really useful, especially in regulatory governmental, um, issues, um, to really have, just good data that you can present about the size and the scope of the industry, um, would be very helpful.

M: Yeah. I think that the, um, is it the Adventure Park Insider, um, Insider, sorry, the magazine, um, they were putting out, um, some kind of survey recently, weren't they?

B: Yes, they just completed, what they called, the State of the Industry survey that we, kind of... yeah we sent out to our members to help get a better response-rate and, um, they're compiling all that data right now and they're going to present some of their findings during our annual conference, which is coming up in February in Georgia. Um, so that would be great to see. And, I think they could probably build on that. We may even, you know, sort of partner with them to really, you know, tap into our membership and get the word out more and, and look more specifically at the kind of data we might want to collect and [inaudible] to put that together and there was some good questions in there and what not, but I think that can get fine-tuned to collect even better data moving forward.

M: Yeah, for sure. I mean, like you said, it's good to have all this data, isn't it, um...?

B: Yeah.

M: Oh, for sure, yeah. Um, so what do you believe is the key attraction to the aerial adventure, um, parks?

B: Did you say "the key attraction"?

M: Yeah, yeah.

B: I think, um, first of all just in the name "adventure", there's a lot of people that really just latch on to that. You know, they're looking for something that, um, maybe is new, they've never tried before or, if they have, they really enjoy it. So, I think the element of adventure is always exciting to people. Um, I think, um, you know just given the growth in the industry, um, there's a lot of people who have never done anything quite like that and the see it or they hear about and, um, they become interested, um, because it is unique, I think

there's a very unique aspect to a lot of the adventure parks out there that are operating. It's a very dynamic industry that seems to be evolving and changing, you know, the technology, the gear, um, the design, all of that, um, you know... it's a rapidly changing environment, so [...]

M: Um.

B: [...] I think those would be the elements that attract people.

M: Yeah. Um, and, um, so, so in terms of, um, I guess, people seem to be at, um, going for this, you know, thrill-seeking aspect of it as well. How, um, what role do you think that, kind of, plays in the overall attraction, um, of the aerial adventure park? This, you know, risk taking, thrill-seeking element.

B: I think it probably plays a fairly large role in what motivates people to give it a go, or if they've done it. Seems like a lot of younger people are very attracted, um, to that aspect. But, I think, ultimately, it's kind of a very individual thing as to why people would participate. You know, they have different motivations, different interests. Um, some people are just [inaudible]. Um, maybe they've seen it in a video or saw something in a magazine and it kind of sparked their interest, um, especially if they've never done it before. Um, but, like I said, I think there's probably a lot of people who, um, you know, engage in other similar activities, um, whether it's climbing or skiing, um, or other adventure pursuits, outdoor pursuits. Um, they just really think this is just one more element that's enjoyable. And it does touch on all those things, you know, the risk taking, a little bit of the thrill-seeking. Um, you know, it kind of pushes your, um, you know, comfort zone a little bit. Puts you in an environment that, um, can be really, you know, um, even if it's not a facilitated experience, you know, you can have a very, um, great experience as a result of participating and come away with some exercise, you're outdoors, you're, you're at a beautiful place. So, I think there's a lot of reasons, but, ultimately it's that, "what is it to the individual who's undertaking the experience?". What is it to them?

M: For sure. Um, so, um, in... obviously your role is, um, slightly different, um, than the, you know, ac... the organisations actually building the courses, um, and what not, but, um...

B: Yep.

M: [...] Um, how would you, um, define risk? Because, the industry does have an, or the activity does have an interesting relationship doesn't it? Because, there is that element of,

um, trying to create, I guess, an illusion of risk, but at the same time you want the actual risk to not be there, if you like.

B: Yeah.

M: So, how, how would you define risk?

B: Well, certainly that element of risk, um, is present. Um, often times I think it's how you present that to the end-user, the consumer, if you will. Um, that might be, for a lot of people, part of the attraction. And then, of course, on the part of the operator, you know, it's all about managing that risk and mitigating that risk through proper use of equipment, the risk design, um, staff training, education, following standards, all of those elements, because, you know, certainly within the activity that carries an element of risk, there's the threat for the possibility of injury or even worse and, of course, um, that is something that has taken place in the industry with injuries and even fatalities on courses, whether it's ziplines, aerial adventure park or whatnot. So, um, the risk is certainly present, um, and it's kind of that, you know, double-edge sword. You know, on the one hand the operator wants to, sort of, promote that risk, in terms of the attraction. You know, putting yourself in an uncomfortable position, taking risk, getting out of your comfort zone, there's personal growth that happens as a result of that, while at the same time, you want to provide a safe experience and make sure that people are not getting injured. So, the operator has that responsibility to make sure that they are managing and mitigating that risk to the greatest extent possible.

M: OK, OK. I mean, I think you might have just have touched on this a little bit anyway, but what do you think are the, are the key challenges then, um, that you, as, um, at [intentionally left blank] are faced in in risk management?

B: I would say, where it really comes, um, comes to be very important is over any regulation or interaction with government officials or agencies that are involved with permitting or regulating the industry. Um, because when they're unfamiliar they don't, typically, know what is being done to mitigate the risk, to reduce the possibility of accidents and injuries. So, our role as a trade association is really to provide education. Um, let them know what we do, in terms of a trade association, to, um, you know, work with the industry on standards, publish standards. Um, I'm seeing a need for, um, better education, especially on the commercial side, over interpreting and using standards, because I think that can be, that can be a confusing part, um, for a lot of people, is really figuring out... you

know, there's not just our standard out there, but there's [intentionally left blank], [intentionally left blank], and then, of course, [intentionally left blank] in North America and then, of course, when you go international there are different standards at play, in Europe especially. But, um, you know, so our role as a trade association is to work on, you know, advocacy, lobbying, presenting the industry in an accurate light on the part of regulators, so that any regulatory framework that is put in place really makes sense and is not overly restrictive, so that operators do have, um, the ability to operate their business and design and offer experiences for the public. So, there's a lot in there obviously.

M: Oh, for sure. Do you come across, um, I guess, unfamiliar regulators, um, a lot then, or?

B: Um, it kind of... what tends to happen is any time an accident occurs, um, there's a lot of notoriety, a lot of publicity, um, regulators, whether it's an agency at the state level, um, in this country especially, you know, they kind of sit up and take notice, because I think a lot of the industry, sort of, flies a little bit under the radar. Um, I think, um, it has always been, um, sort of, self-regulated, certainly, and again, I keep referring to the US, um, it does vary from not only, um, you know, North America and Europe and Asia and Latin America, different places are, you know, they're either regulated or not regulated. Um, but after an accident, that's typically when we try to offer support, resources, education, understanding to any regulators, um, because they often inquire about, well, "how is this industry regulated?", um, and then of course, what happened years ago is they generally tried to fit regulating the industry into, um, like the amusement park industry.

M: Right, OK.

B: Right. And, um, it, it does not really fit that way. The two are not really, um, alike. Certainly, there are some similarities, but there are a lot more differences. You can't just take regulations that were designed for amusement parks and just say, "Well, we'll just regulate the industry like amusement parks". So, it's a lot of different issues there, so...

M: So, how do you think.

B: But, I think regulation.

M: Sorry, go ahead. Sorry.

B: I was just going to say, um, I think we're going to see more regulation in the future, especially as the industry grows and becomes, um, more noticed. And regulation is not a bad thing. I mean, ultimately it's designed to protect the consumer and the public and we

just want to make sure that any regulation, that, really, stakeholders are involved and at the table when those regulations are being designed. So, it's really help the regulator understand, um, you know, you can't just take regulations from one [inaudible] industry and apply it to another. It's sort of like comparing apples and oranges.

[Laughter]

M: Yeah.

B: So, but, we try to have, you know, a stakeholder, an operator, um, really engage with that regulatory agency to be a resource and provide an input during that process so that it really makes sense and can be supported.

M: OK. So, um, in terms of the amusement ride standards, I guess, um, that it sounds like they're, they're trying to on to you guys. So, how do you find the two different, um, between you and the amusement ride?

B: You know, I think it's, um, that's a great question, you know, because, on the surface you would think, 'well, you know, they're very similar, so why could you not simply take the regulations for, um, the amusement industry, um, because there are some similarities there. You know, they have inspections and certified inspectors that, um, you know, inspect different rides and, and [inaudible]'. So, there are some similar processes in place and, and even sometimes some standards, but the issue is that you've got to have people who are doing those inspections who are knowledgeable about the industry and the differences in the types of design and equipment and how they're operated, um, the staff who are involved. So, I think those are where the differences really come in, that have to be acknowledged and addressed in any kind of regulatory framework.

M: OK. OK. So, I don't know if you said this already, but, did, did you say, do you collaborate with the other standard, standard writing organisations, like, the ones in the EU, or...?

B: Um, predominantly ASTM. So, um, yeah, that's, that's a very large standard development organisation. I think they've published over 12,000 standards across many different industries, but they started to develop standards for, um, challenge courses, aerial adventure parks, um, a number of years ago and then we collaborate with them to really try and harmonise with our standard, and, um, often times the standard that is cited in regulations around the states is the ASTM standard. So, I think, we're starting to see more, that they might cite both, because, um, the ASTM standard really only applies to commercial operations, so, you've got all the traditional operators, that, um, you know,

that standard, um, might not necessarily apply. So, it can get a little confusing on that side of the issue, with, um, regulations and standards, but, um, I think that, I think as the industry, again, kind of, evolves and moves forward, um, it should become more of a collaborative process, for sure.

M: Yes, do you see the standards, kind of, becoming, um, one standard, rather than numerous different ones.

B: You know, I think that would make it easier on the end-use, because a lot of people still are very confused about, not only, what standard they should be following, um, but the differences in the standards, and even in, in interpreting the standards. So, I think, this is where, again, we can play a role in providing more continuing education, workshops, like we do at our conference, but we could expand that, so people really have a much clearer understanding of, you know, what the standards are, why are they're important, how do you interpret them, how do you comply with them? I think, that's where I'm seeing there's a huge need right now.

M: Yeah, because I think that, um, you talk about the understanding of the standard, I was talking to somebody the other day who was, um, um, the person and a, um, government official had two different understandings of, um, um, the saying, or whatever, in the standard and, um, and they ended up, obviously, taking that further. I thought that was very interesting, you know, one line in the standard, but there's, there's two very different understandings of it.

B: Yeah. Yeah, exactly, and, um, you know, that, that can lead to some problems, um, or, if people are really left on their own to interpret that, or, not complying with the standards at all, um, or, or at a very minimal level, because they don't really understand, um, what the standards are and how to use them, ultimately, and how you can be in compliance with them. So, I think that's, um, a huge need that exists in the market place and, of course, you know, the main reasons for standards is to put a framework for risk management in place...

M: Oh, of course, yeah.

B: ... getting back to risk management, you know, that's the whole purpose, to really establish, in different areas, whether it's inspection or operations or training or equipment, is to really have standards that define those, um, either practices or, um, outcomes that you would need to address the risk.

M: Yeah. Um, so what does, I mean, what does effective risk management look like to you, then?

B: I think it's, it's a really comprehensive approach that touches on all facets of the operation. So, it's having a good business plan in place, it's having your insurance in place, the proper insurance, um, your participant screening, so you know what kind of participants are right for the kind of activity you're offering, the right equipment, the right staff, the right kind of staff training, the right kind of inspections to make sure that the course is really, um, up to a particular standard, and that that's done by a qualified third party individual to provide that, um, professional, outside perspective. So, I think it's really, it's a very holistic approach that touches on all those different elements. It's not just a single thing, um, but that it really is more of a comprehensive approach, um, in all those areas.

M: Yeah. So, it's really an all-encompassing, if you like, an approach. Um, OK.

B: Yeah.

M: In terms of, I guess, your organisation, what role or impact does risk management have of your overall strategy then?

B: I think it plays a, a large role, um, and you see it really play out at our annual conference, um, with a lot of the different workshops, which, again, are all about professional development, training, education. I think we offer a really good variety of workshops. I think we could expand that, because a lot of people cannot make it to the conference for a variety of reasons. Um, maybe when the date is, um, they've got other, um, things on their calendar that conflict with that, so, they would love to be able to attend maybe some workshops, but they cannot do it. So, we can offer some of those in different locations throughout the year, but I think risk management is a big element in terms of, you know, providing that professional development so that anybody who is in the industry really has access to the latest knowledge, standards, techniques, um, best practices. All those things are really important.

M: Yeah, and, um, just going back to what you were saying before, that, um, a lot, or not a lot, but, um, some people can't make it to the, um, the conference, for, for whatever reason, but do you think that, I guess, limit, do you, does that limit the outreach of the [intentionally left blank] to a certain extent?

B: A little bit, yeah. I think that and just, um, you know there are still people in the industry who have either never really heard of us, or, or they've heard of us, but they don't really know what we do. So, there's kind of that, that facet that exists out there. So, if you asked 10 different people in the industry, um, you'd probably get a wide range of, um, opinions. And, of course, looking at our membership, um, there's a lot of people in the industry that just really do not feel like they need to be a member. You know, they don't understand what the benefit would be, why do they need, you know, why do they need the standard? Or, you know they don't have to be a member to purchase the standard, they can do that as a non-member. But, I think we've battled that a little bit. It's just that we're a small organisation, we're trying to do a lot. We're trying to expand our international reach and awareness. But, that's where it really comes off, where a lot of operators, especially, what with Latin America and, um, Asia that really just have no idea who are and what kind of benefit there would be to connecting with the organisation, either as a member or just simply coming to the conference and to be exposed to all these different things that we offer.

M: So, um, with just having the one conference, um, a year, are you looking at doing it more often or, or doing some... I guess, do you do anything virtual, um, at all?

B: I think, um, we're going to start offering some webinars and some of these other... we're, we're going to develop what we're calling [intentionally left blank] University, um...

M: Oh, cool!

B:... and that will be focussed on, you know, so it will be online training, continuing education, a lot of it will be more workshops around the country, probably even internationally, um, to kind of take some of this on the road and, um, starting really with our standards and offering workshops about the standards to help people understand how to interpret them, how to use them, why they're important. I think, there's, again, going back, getting back to that one in particular, there's a very large need for that in the industry. So, um, we've also looked at offering some regional conferences in some different places and, um, I think we're even exploring, a little bit, maybe trying to offer, in conjunction with some of our [intentionally left blank], we have several in Asia, um, maybe trying to do more of a regional conference, um, in that part of the world, because I think there would be a huge need there as well, so... Yeah, we're going to bring in some different things to really expand. I think, really for me, um, I think that's a huge role that the

organisation could play, um, throughout the industry, is more education and training, professional development.

M: Um, OK. Yeah, that would be amazing if you could do something in Asia. Um, yeah, wow.

B: Oh, yeah. Well, you know, there's a lot of, um, challenge courses in that part of the world, whether it's Singapore, Korea, Japan, China. I mean, it's really growing very rapidly there as well.

M: Yeah, actually I had no idea that that's, um...

B: Yeah.

M: Wow. Wow. OK, um, and, um, how do you, um, how do you monitor that your members are, um, following these, I guess the standards, or the risk management procedures? Is that something you monitor, or?

B: Well, just given the size, or the scope, of the industry it, it's really hard to monitor. Of course, the [intentionally left blank], right now we have 40 of those members, again these are the companies that are the designers, builders and installers, um, throughout the world really, I mean, a lot of these companies build, um, in many different places. They're kind of our finger on the pulse of what's happening and getting us, you know, feedback about what's happening out there in the field or in different places. What they see as the needs or what they see as the issues. So, we are responsive to that. We have, of course, just through our membership, you know, we have a lot of members that pass along a lot of information or, you know, requests from us. So, it's really, you know, it comes from a variety of sources, but mostly within our membership and then, you know, people can contact us, um, through the website. They can fill out contact form with whatever issue it is, or they're looking for help with, or want to get more information about, so it really comes from a variety of places.

M: OK. Um, so how do you empower, or encourage your members to, um, to really share the information and knowledge they have with you?

B: I'd say it takes place, um, really a lot through our conference. That's really where we have the opportunity to connect with people, have a lot of networking, a lot of sharing, um, a lot of that good learning and education takes place there and that's why we're looking at expanding that, um, because, again, it can be hard for people to attend, um, with one

conference a year, especially if those dates, at that time of year, do not work. So, offering something at different times of the year and in, you know, different locations, not just in the US. You know, we, we're, we're an international organisation, but, you know, I would say we're very US and North American centric right now. And, you know, Europe has a very strong model in place and, of course, there are aerial adventure parks throughout Europe and a long tradition of the outdoor pursuits that this, kind of, falls into. Um, but certainly in places like Latin America and Asia, it's a newer industry that really, there's a strong need for training, educational, professional development, standards, so...

M: Do, do, do they not have...

B: [...] so, I think there's an opportunity...

M: Do they not have an organisation like the [intentionally left blank] then in Latin America or Asia?

B: In Europe do you mean?

M: No, no. I meant in Latin America or Asia, do they not have a similar organisation?

B: No, no. We've, we've actually, we've had a request from somebody in Korea who really wants to start, sort of, a, an ACCT organisation in, in, um, Korea. So, we're looking at maybe developing something like a chapter. We could have chapters that, um, we would have a framework in place where if somebody wanted to start something that we would put them, kind of, under our umbrella and support them and work with them and they could really, you know, do similar things that we do, just in their part of the world.

M: Ah, that would be exciting, huh?

[Laughter]

B: It would be, yeah.

M: Yeah!

B: You know, we're not close to doing that, but, um, it's certainly one of my goals, is to really develop a chapter model, um, because that, that's one way we can really expand our reach and if people are left to their own to do that, um, you just never really... um, I mean, we've been around for over 20 years, so we've got a really good base of knowledge, experience, people within the organisation, somebody to learn really quickly from as opposed to starting their own and, kind of, reinventing the wheel, so to speak. It just really,

as a chapter model, really, kind of, have a templet in place for offering, kind of, what we do and being members and being advocacy group for the industry. So, yeah, it could very exciting to really expand internationally in that way.

M: I think so, yeah. I think that would be a massive opportunity for the [intentionally left blank] as well. Yeah. Wow.

B: Yeah.

M: So, how, um, just going back to, um, sharing the information with the members and so on, how do you, um, learn from their knowledge then and how do you implement these lessons that, that you learn from them?

B: I, I think again, it really comes back to the conference. It's such a great opportunity, because everybody is in the room, everybody, well, not everybody, obviously.

[Laughter]

M: Sure!

B: But, I mean, we get somewhere around 1200 people at the annual conference. This is a very good, sizable representative group, you know, the traditional use folks, commercial operators, um, vendors, different members who are represented. So, it's a really good way to just, you know, get that information, have that communication, share resources. Um, of course, we do send out member announcements, we do have... you know, it's, it's really a two-way loop, you know, it's not only information we're putting out, um, but it's trying to learn from members, and you know, I keep pointing to our [intentionally left blank], since that's the community of folks that are really very active in the industry, and, um, um, pass along a lot of really good information to us about what they see the need is or any issues that come up, if we need to be, whether it's a regulatory issue or anything like that, um, that we need to really be, you know, working on or aware of. And, we have a lot of volunteers and different committees within the association that work in different segments of the industry.

M: OK. And how important do you think leadership is, um, plays in this, certainly in terms of effective risk management as well?

B: Yeah, really crucial. I mean, obviously, you've got to have really solid leadership in place, um, you know, within the organisation, absolutely, but within the industry to keep the

industry strong and healthy and, um, moving in the right direction, um, so, it is a really crucial factor, absolutely.

M: And, um, I think you've touched on this already a little bit, [intentionally left blank], but how does, just in general, how does the state, um, and, um, or the states, and other stakeholders, such as insurance, how do they influence risk management procedures within the industry?

B: Yeah, that's a good question.

[Laughter]

B: We haven't really touched on that, on the insurance aspect, but, um, we've, um, worked with a particular company called Hibbs and Hallmark and they were, um, very instrumental, um, at the beginning, and going back to the early days of the industry in the late 1980s, early 1990s, with trying to understand the industry and its needs and how to, most appropriately and effectively, insure the industry and, of course, they, they are at the conference and provide a lot of, um, you know, not only good information, but they, kind of, keep their fingers on the pulse of what's happening in the industry and, um, so that's an important element as well, um, is the whole insurance aspect, in terms of risk management, um, that operators are, you know, certainly concerned with costs, but this is where that risk management, um, really comes in to play and having a really overall operation that mitigates the risk, um, so that they, um, you know, have a really viable program.

M: Right, yeah, because, um, um, it makes it more sustainable in the long-term, right, to not cut corners and that, yeah for sure.

B: Yeah. Absolutely.

M: Is it voluntary to follow the state's recommendations? I mean, do they already regulate in, in the US?

B: There, there are a handful of states, I believe it's around 14 or 15 states, um, Colorado is one of them, um, that do have regulations in place and they do cite, um, the need for annual inspections following either the ASTM and/or ACCT standard, um, as well as some other, you know, insurance requirements and things like that. So, I think this will be an area, going forward, we'll start to see more states regulating the industry. Um, I think it's kind of catching up, it used to be that the industry really was, very much, under the radar

and now it's just grown so much and it's more visible. Of course, any time there's an accident, or a serious accident or a fatality it draws a lot of attention and a lot of publicity, catches the eyes of the regulator, who see more of a need to regulate the industry, so I think that's going to be, in the years ahead, a very large issue. And, of course, insurance ties into that as well, so...

M: Of course, yeah, I've heard some people say that it's gone up a lot over the, you know, five years or so.

B: Yeah, exactly, and, um, you know that's, that's something that, again, is more of a, a, a changing landscape, um, as well, the insurance. But, um, I know it does, um, affect the operator and that, and, when they're looking at that cost, for sure, and seeing it increase every year, even if they, themselves, have not had any serious accidents or injuries on their site. You have one or two in the industry and it, kind of, affects everybody.

M: Um, and that's, kind of, my next question actually: How do you think an incident at one park affects, um, the rest of the industry?

B: Yeah, well it affects them in a number of ways. One is perception, um, especially among those who really don't know. They kind of see a high profile accident or a fatality and they think, "Oh my gosh, you know, this looks really dangerous", um, "is it regulated? Should it be regulated? How should it be regulated?". Um, so there's a perception about the industry that is formed as a result of an accident or an injury. Um, you know, the insurance, it affects that with rising premiums. Um, regulation, you know, it touches in a lot of the different areas that we've been talking about and, um, it does, ultimately, affect the entire industry, though, and that's where, again, the need for education, training, standards compliance really comes into play. Especially among operators, kind of, at the one end of the spectrum, that perhaps their practices are not at the best-practice standard and they're [inaudible] and those are exist throughout the world. I mean, there are certainly operators out there. In fact, there was just a fairly high profile accident in Asia, last week, with an operator, that has had a series of accidents over the last, um, three or four years, and the authorities, this is in Thailand, are really starting to look at, you know, perhaps a more stringent regulatory framework, um, and how best to respond when these accidents happen. So, it does, you know, it affects the public's perception, affects the insurance, regulation, other operators, so, there's definitely a need, again, getting back to the risk management element, to really ensure to the greatest extent possible, that the risks are being mitigated.

M: Yeah. Yeah. Wow. Um, and so, um, I mean we've already talked, um, a lot about collaboration within the industry, but where do you see the benefit then of collaborating, um, particularly on risk management?

B: I think the biggest benefit is that, um, people can, again I'll refer to the conference, what happens is that people coming together, they're exposed to different workshops, they see what other people are doing, or not doing, um, they get to hear about, you know, latest equipment, technology from manufacturers who are there. It's just a really good opportunity for people to really find out what's happening in the industry and how they can improve their own operation or, um, inc, increase their, their safety factor. So, I mean, collaboration is really important, as opposed to when you're just kind of op, operating in isolation, it's harder to know what else is happening out there, whether you, as an operator, really, you know, at a particular standard that is either, you know, where it should be, is it lower than it should be? You know, you really need to collaborate with others to find out, um, where your own benchmark is.

M: Because, I mean, I suppose, really, the [intentionally left blank] is probably the main facilitator of collaboration within the industry, right? Because, like, your conference, for example.

B: Yeah, I think so. I mean, there's, again, I've referenced the PRCA in this country, the Professional Ropes Course Association, but they're very small, you know, they, they, they develop standards, but they don't offer an annual conference. Um, we're really, you know, sort of, um, the largest association, trade association, at least in this country, that's really working on behalf of the industry, publishing standards, offering professional development. Um, so it's... um, but yeah, it's, there's real need for that, for people who, regardless of how they are involved with the industry, to really tap in and, um, learn about who we are, what we do, and what we offer and to get involved.

M: And, um, so what, what, what do you believe is required for a, um, for collaboration, in general, to work?

B: I think, one, people have to be open to it, they have to see the need, they have to understand why it's important, um, ultimately, how it, um, it, um, can help them learn and grow, become better operators, um, put the right sort of system, structure in place. Um, but I think that whole process really, um, benefits everybody, is that if you do have

collaboration, um, and are working towards similar ends, it really does, it helps the industry just become stronger, that should be the ultimate goal.

M: Mmm. I mean, one of the things that I've come across is that, um, especially with a lot of the stakeholders in the industry are SMEs, or small-to-medium enterprises, um, that seems to, because obviously, they, they may not have the finances or the time, um, to attend the conference, for example, um, how do you think that, um, impacts collaboration within the industry?

B: Yeah, I mean, if they cannot participate, um, it definitely has an effect. We would love to see greater participation and, again, one way I think we could do that is by developing chapters, offering a lot [inaudible] through, um, through some, you know, webinars, online workshops that travel around to different places. I think it's, you know, it's a multi-faceted approach. It involves all those things, because, coll, collaboration really is important from my perspective. Like I said, it really, it does strengthen the industry and raises the standard, that people are a little more connected, engaged, um, it just, it really has a beneficial effect.

M: Do you think it would be beneficial for, um, I guess the [intentionally left blank] probably, because of you already have, um, the facilities, um, maybe to do it, but to, to create something like an industry bo, industry-body with, um, with a sole focus just on improving risk management procedures within the industry?

B: Yeah, I think there is a need, um, again, through our standard development committee, that's, kind of, our main channel right now. But, what I'm seeing with the standards, a need for education and training around that, not just, sort of, publishing standards and putting it out there, but really helping people figuring out how to comply with the standard. But, I think, some of the other approaches that we've talked about, that go beyond just the standard, which one part of risk management, is, um, offering workshops around other elements of risk management that are equally important. Um, staff, staff training, um, what their needs are, equipment, using equipment properly. All those types of issues.

M: So, so is that something you've already thought about. Doing something like a, um, I guess, almost like a safety committee, almost?

B: Yeah, yeah, it's, um, I think that is something that is in our mind. We haven't really gone down that path yet, but I think there's, there's a huge need for that, to do that.

M: Oh, wow. OK. Um, so, um, because we talked about, or you mentioned as well, you know, not all operators are, um, I guess, up to scratch, um, on following the standards and so on, so do you think, is it, is it worth it, um, regulating the entire industry then? Um, because, if it's only 14 states that do it, obviously, there's, there's a fair few that perhaps do not follow those standards.

B: Um, did you say the question is, "do I think it's worthwhile regulating the entire industry"?

M: Yeah. Yeah.

B: Yeah. I, I do. Again, as long as stakeholders are involved and that whatever regulation is put in place, um, really is the right kind of framework to regulate the industry. Because, there's a lot of differences, variations that I think you do have to allow for, to a certain extent, but there's a, a basic framework that would be beneficial, um, to, kind of, again, a regulatory framework tries to pull everybody into a place of insuring, um, safety, which should be the end goal, but there's different ways to accomplish that. But, um, that's where you want the expertise in the room to figure out a framework that, um, is the right kind of framework to ensure doing that.

M: Mmm. So, really a partnership between the industry and, and the public agencies?

B: Yeah. Exactly. Because, if you have people regulating the industry who do not understand it, that's, in my mind, counter-productive. Um, and that's what happened, to a certain extent, with the amusement, um, industry. Sort of, regulators initially saying, "Well, they're kind of like amusement parks, to some extent. We'll just regulate it like that". Because, they really don't know. And, there might be some of those regulations that are just inappropriate, um, that do not, do not make sense. So, whatever regulation in place you want to make sure that, um, that, um, it really does achieve a very good end-result.

M: Um, OK. Yeah, so you just answered my next question, then, in terms of, "would it be an issue that there may be a lack of industry experience on, on the public agency side?". Yeah, I mean, do you think it should be, um, on a, um, state or regional or federal level, um, these regulations? Um, would it better... because it seems like they're trying to do it on a state-by-state basis. Would it be better to do it federally or...?

B: Yeah, I think, um, that that's a good question. I mean, obviously, right now it is at the state level, so operators adhere to the particular state, and it is a little bit of a patchwork that varies from state to state, in terms of how the regulation is, is set up. Um, but I think,

for now, um, having it at that level, um, does allow for a little more of a, you know, making sure that regulation within a particular area, um, really does make sense, as opposed to one size fit all, which is probably what would happen at a federal level. So...

M: Um, yeah, because, I think as well, um, I mean in terms of the, um, leadership, um, for collaboration, um, what role do you think, um, leadership plays in the collaboration being a success, um, I guess, in terms of risk management, but also in general?

B: Yeah, I think, again, getting back to collaboration, I think it's essential. Um, it's not going to happen with people in isolation, just kind of, ignoring what else is happening out there and not being aware of the standards, not really trying to learn about, um, best practices. I think those things only come through, um, collaboration and engagement, um, and the conference. Again, that's just one format to do that. There are others, but I think that, that has, that has to occur and it has to increase, because there are lot of operations that, kind of, do operate in isolation and, um, don't really see the need to collaborate. They might figure, "hey, I pretty much know all there is to know and I'm doing a great job, so why do I need anybody else to..."

[Laughter]

B: [...] "either learn from or tell me anything", right? Because, certainly there are people like that, so...

M: How do you think that affects the industry? Um, people operating in isolation as such.

B: I, I think it is not good for the industry. It weakens the industry, um, for some of the reasons that we've touched on. But, you just, you know, anything you do in isolation, um, you know, is limited. Um, it is through collaboration that you really learn, you expand, you grow, you change, um, you get better. I think, it's, it's just a really crucial process.

M: And, um... just two more questions left for you, [intentionally left blank]!

[Laughter]

B: Sure.

M: Um, so, um, when we talked about the risk management, um, you know, you talked about how you see it as an, um, all-encompassing tool, um, really. Now, in terms of doing something like a collaborative arrangement on, um, risk management, how would you, like, how do you see the focus? Do you see it, again, as all-encompassing, or do you prefer to, um, focus mainly on, say, the building of the sites, for example?

B: I do, I do see the very all-encompassing, that you could certainly break down into different elements, but I think, all those elements have to be in place, understood, um, for you as an operator to really have an effective risk management programme. So, um, there's different ways to approach it that we could, you know, take on through educational, professional development, but, in my mind, risk management is not just one single element. It's a very holistic approach that touches on many different facets that you want to have in place and, um, that should be the goal.

M: OK. Right, um, and my final question is, is just, um, how do you see the industry, [intentionally left blank], I guess over the next 10 years? What do you see happening?

B: Great question.

[Laughter]

B: Yeah, excellent. Let me find that crystal ball. Um, I think it will continue to grow. Um, I think it's here to stay. The biggest thing for me is it's really dynamic and evolving. You know, ski areas are really looking at, you know, especially with climate change, like, "hmm, maybe we should develop other types, other types of activities that bring people up to the mountain if we don't have snow". So, they're looking at, you know, summer activities, bike parks, adventure parks, canopy tours, you know, ziplines. And the technology, you know, is coming from the ski industry and it's evolving, so I think, the biggest thing is the, is the very dynamic, growing, evolving, rapidly changing industry and I see that continuing forward, certainly, in the next 10 years. So, it'll be interesting to see how it all turns out, but, I think all the things we've talked about are also part of that, you know, insurance, um, equipment, design, um, you know, there are certainly that element of the industry, "I have the longest zipline in the world and the highest...", you know, there's all of that that is going to play into it. Um, but I see it, really, ultimately, is, um, very evolving, rapidly growing industry, for sure. Um...

M: I'm sure that...

B: I see that continuing.

M: Yeah, I mean, with all that innovation that essentially calls for more collaboration, then, doesn't it? Or for collaboration to continue.

B: I, I think it's going to be even more important going forward, I feel like. So...

M: Yeah. Well, thank you very much, [intentionally left blank]. That's all I've got and you've answered my questions, um, fantastically. Thank you very much.

B: Oh, absolutely and like I said, it's my pleasure to be, um, involved. Um, thanks for reaching out to me and, um, if anything else comes up, feel free to get in touch and, um...

M: Oh, I appreciate that!

B: [...] um, thank you for, you know, putting all this together and putting all the work into this. This is definitely, this is another piece that's really needed, just more research in the field and, um, studies. We're all learning more and more and I think that's really positive.

M: I hope so. I mean, um, all being well, I should graduate in the summer and I'll certainly look to pub, publish some work, um, and I think, um, it will be very beneficial, um, for the industry, just, just like you said, to get some more research out there, um, as well. So, um, no, thank you very much, [intentionally left blank], I appreciate it.

B: Fantastic. OK, Marcus. Well, hey, en, enjoy your evening and it was a pleasure talking with you.

M: Thank you very much and have a lovely Christmas!

B: And you as well. Cheers!

M: Cheers. Bye.

Call ended.

Participant 8 Conversation

B: Participant M: Me

B: Hello?

M: Hey, [intentionally left blank], it's Marcus.

B: Hi, how are you?

M: I'm good how are you?

B: I'm doing good.

M: Good. Thank you for taking the time to take part in my study.

B: Yeah, no worries.

M: Good. Is there a bit of an echo on your side as well?

B: Um, I don't hear one.

M: OK, that's good. It's just me then!

[Laughter]

M: Um, I just, before we start I just have to, um, run through a couple of, um, I just want mention a couple of things. Um, I am recording the interview. Um, I think I mentioned that on the email as well. Um, and I'll, and I'll, basically, just send a copy of the recording to you, um, after the interview has taken place, um, and once I've transcribed the interview, um, which will probably take me about a week or so, I'll send a copy of that as well.

B: OK.

M: Um, and obviously, you do have the right to withdraw from the process at any time. Um, your identity will be kept confidential, um, and I'll just use something like pseudonym, like, um, um, 'Person A' or something like that in the transcript.

B: OK.

M: Is that OK?

B: Yes.

M: Fantastic. Good. Um, so, well, um, do you have any questions before we start?

B: I do have one, yes.

M: OK. Go ahead.

B: As I was reading your interview questions, it's asking me about my role within the organisation. Are you interviewing me for my job that I get paid for or for my volunteer board position at the ACCT?

M: It's the one you get paid for. I was, um...

B: Perfect.

M: ... yeah. I was, um, I couldn't find your, um, company email to start with. I don't know why, I think it's maybe because I was looking on my tablet, um, so that's why I sent it to the volunteer one first, because that came up straight away.

B: OK. No worries, I just wanted to make sure where I was speaking from.

[Laughter]

M: Of course. No, no, that's absolutely fine. Um, yeah, so, yeah, basically, the one you get paid for.

B: OK.

M: Good. Um, so please tell me about your role within the organisation.

B: Well, our organisation is an engineering firm and, um, I am the department manager that manages all the aerial adventure course projects that come in to our engineering firm for engineering or for other types of... you know, consulting support, um, in the aerial adventure course world.

M: OK. So, do you, um, do you actually design the courses or do you look over someone else's design?

B: Um, a little bit of both. Some manufacturers design the courses and don't like a lot of feedback. Others, um, tell you what they want and you, kind of, give them something to consider and then they give you feedback. Um, so it's a little bit of both. There's, kind of, a spectrum depending on, um, depending on how particular the, the designer, the manufacturer is.

M: OK. Um, and do you, um, do you go out on site as well or how, how does it work, sorry, [intentionally left blank]?

B: Um, not really. Sometimes we go out on site just to, you know, look at, you know, what the manufacturer is visioning. Um, but most of the time, um, we do, um, we take what they've done and we get the survey from the site and they, kind of, plop it on to the survey and we go from there. Um, they give us the geotechnical information, so we get a lot of the on-papered part of the land and don't have to see it, um, initially. We go on site after it's built to make sure it got built according to the plan, um, and that's about it.

M: Alright, OK. Do, do you operate within numerous of states or...?

B: We do, yes. We have, um, we're registered engineers in 25 states, um, and we add more every month or so, um, right now.

M: OK. And so, um, how long have you been involved in the aerial adventure industry? I guess, you personally as well.

B: Yeah, me personally, I started with the aerial adventure course industry about 1998, um, up in, um, up in a summer camp in Colorado, and then, I was, I worked at our, at our challenge course at the university I went to in Baylor and then I started working for a manufacturer down in Texas around 2001 and worked with them for about 15 years before I moved up to [intentionally left blank] and started doing consulting and then I basically combined my consulting business with the engineering firm I was using all the time.

[Laughter]

M: Oh, wow. OK. Oh, wow, so it's quite a while you've been in the industry.

B: Yep.

[Laughter]

M: Um, so what do you, I mean obviously with you having been in the industry for such a long time, um, I guess it's changed somewhat, um, in the last few years. Um, what do you believe is the, um, key attraction, um, to, um, the aerial adventure parks now?

B: Um, it has changed a lot and I think the reason it's changed a lot is it's just entered the commercial realm, um, in the US, and, um, the attraction is, kind of, different for different people right? So, the, um, operator itself, the attraction is, um, obviously, you know, it has a pretty good profit margin, um, typically, and, um, they like being a part of adventure in other peoples' lives. Um, and then from the public, I think the public likes, um, there's been a boom in it because they can go and do something adventurous, um, with relatively low risk and, um, I think that that's been something the public's been really taken to and

there's a lot of people out there that, you know, vacation and try and do as many ziplines as they can on vacation or do as many adventure courses as... it's just, it's like skiing, or something, now. It's a bit of a... I don't know that I'd call it a sport, but it's a bit of a, an attraction that, um, is available in lots of locations.

M: Yes, I mean, that, that's part of the reason why I'm really intrigued by the American industry, um, because it seems to be booming so much.

B Oh, yes.

M: Um, what role do you think that this, um, you mentioned it just earlier, actually, um, this relationship with, um, I guess, with risk or the thrill seeking, um, how important do you think that is to the overall attraction?

B: Um, I think it's actually very important. Um, without a perceived risk it's not adventurous. So, that perceived risk is what makes it adventurous. And, um, from a perspective of the amusement park, the amusement park is not supposed to have a perceived, it's not supposed to have an actual risk, it's only supposed to be perceived, but with an aerial adventure course, because the patron parti, participation is higher, that risk is, is very different. Um, you know, the patron can fall off the thing and have to get back up on it, whereas on a roller coaster, that's not an option, because the patron is not required to participate. So, that patron participation is what makes it different and what makes it unique and exciting. So, um, if it was a ride, then I think it would be just like the other rides, but since you have something to contribute, it makes it very different.

M: OK. OK. Um, so, bearing that in mind, given that there is this strange, I guess it is a strange relationship with risk, right, because the participant doesn't actually want to get hurt, but they still want to experience this thrill.

B: Yep.

M: Um, coming from the industry, how would you define risk then?

B: Hmm. Well, risk itself is a little bit different than how I would define it in the industry. What do you mean by how I would define risk?

M: Um, well, so, my research, so far, um, has, um, come across, um, as a bit of a hybrid, um, between something that's a little bit of a dare, um, but also a negative, um, and positive in the sense that, um, the positive feelings that it gets from the participant, I guess.

B: OK?

M: Um, does that make sense?

B: Right, and I think risk is, you know, being exposed to danger, um, but I think that the danger part is, you know, perceived versus real and so, in the aerial adventure course world, hopefully, through proper design and training, that perceived danger that people are feeling and being a part of, but when it's real danger, you know, when it's real danger, nobody wants to be... experiencing, um, real danger, um, without, kind of, being prepared for it. Um, but any time you climb something you are at risk of falling. I mean, no matter what it is. So, you know, it's an inherent part of the, um, aerial, part of the aerial adventure course, you know.

M: Yeah, for sure. Um, what do you think are the key challenges, um, that, I guess, that you face, with you being a designer, I guess, um, or an engineer. Um, what do you face in risk management? Or what are the key challenges you face?

B: Um, some of the key challenges we face are when people want to be bigger and better, faster and crazier!

[Laughter]

B: Um, because, as an engineering firm, you're trying to make what people want to do, happen, um, but with that comes, um, exposure to our firm, as well, you know, for trying to design something, and a lot of times, designing something bigger, faster, longer and higher, um, takes you to the edge of the engineering realm as well. Things get bigger and more expensive and lots of systems and back-ups and stuff that come through. Um, and so, a lot of the struggles with that is that everybody want something bigger, faster, higher, crazier, um, but they don't want to do anything different, um, with products like that. Um, they don't want to pay more, they don't want to, you know, get more training, they don't want to, you know, be responsible for more maintenance stuff. So, it's a, it's, kind of, a funny balance, um, that we just have to be really aware of. We as an engineering firm have had to get very aware and involved in the operations, because, in the engineering world it really is just maths about a structure, but in the aerial adventure course world of engineering, you can't consider the structure without also considering how it's going to be used. And, um, a lot of times our clients have a really hard time when, as an engineering firm, we're questioning how they're going to be using the thing, um, because they're like, "no, you're just the engineer. You're just supposed to do maths on the structure", and, um, we can't

just do the maths on the structure without considering how they're going to use it, because it exposes us when they do something crazy.

M: Oh, OK. So, you, um, you almost, um, take, well you take an interest in how they're going to operate the park as well?

B: Yeah. We'll review their operating manuals. Um, a lot of what we design to in our current realm, um, is the ASTM standard, which is the amusement device standard. And in the ASTM standard there are a lot of operational documents that are required to exist along with the, kind of, engineering package, and, um, some jurisdictions require the engineer of record to sign off on the operational documents and package, um, which is kind of odd. Um, like the Forest Services and California, um, want the engineer of record to, to, kind of, sign off on it and bless it. In California, it's not the engineer of record as much as it's, what they call a QSI Inspector, a quality safety inspector, so in those jurisdictions, the engineer is forced to consider and, you know, sometimes even stamp the operational documents, um, which is just crazy, because everybody is, you know, making decisions out of fear. Not out of what the most, um, logical thing is. So, we had to, kind of, gang together to be able to provide any of that service, um, between my consulting firm and the engineering firm, um, because the engineers aren't comfortable reviewing operational documents, since they've not ever operated one.

M: Right. Yeah. Oh, wow, do you find that a lot, that the, the states will ask extra stuff from you, if you like?

B: Yes. Yeah, basically, anybody that, um, any jurisdiction that's actually asserting jurisdiction over a course being built, um, asks for whatever they want and you can either give them what they want or fight them on it, or argue with them, and arguing doesn't get very far, so, because they want someone with a license to be, you know, on the hook for these things. It's, um, typically, the engineer that's got the license. Everybody else doesn't really have a license in the, um, in the mix. The manufacturers are just that, they're manufacturers. They may have a constru... you know, like a contractor's license to build, but it's not a license to, you know, build aerial adventure courses. They may have an accreditation for aerial adventure courses, but that doesn't actually mean a whole lot in the jurisdiction world.

M: So... oh OK. So, in many cases, you're the only one with a license in that stat then?

B: So, yeah. In many cases, it's, it's us and the general contractor and the contractor usually has to sub-contract a specialty building, um, that knows what they're doing with the aerial adventure courses.

M: OK. OK. So, um, what, so what, I guess, you've already touched on this a little on the operational side, but, um, what procedures do you have in place, um, in terms of identifying and assessing and responding to risks?

B: Um, you know, the procedures that are in place are, kind of, defined for you in the ASTM standard. There's a, um, there's a thing called a ride analysis. Um, it's in the process of potentially being renamed as a 'device analysis', since not all of our aerial adventure courses are rides that you sit and go on. Um, but the ride analysis is something that's like a procedural process, um, a procedural step that you have to go to to, kind of, analyse the whole ride, where people walk up to, where they get their equipment, where they start, where they can continue, where they end, where they can come down. And then, as you go through that ride analysis, there's a hazard analysis that happens, um, in the same ride analysis piece and, you know, there's parameters in the ASTM standard about how you have to go about doing that. So, what could happen? What could go wrong? And, um, you know, it's a numbering system. What's the likelihood of it and, um, what's the outcome of that going wrong? You know, is it really bad or is it only a little bit bad? So, those kind of pieces right there. Um, usually our clients come to us with the design and we do the maths and then they also come, we also request that they send us their operating documents, so that as we read through the operating document we can find, you know, where their operating documents are lacking, um, and then, where their operating documents, you know, are, are good, and we give them feedback on their operating documents, but mostly the operating documents help us understand how that design is intended to work. So, um, yeah.

M: Right. OK. So, um, I assume that a lot of your clients will also be following the ASTM standards or the ACCT standards?

B: Yeah, usually when people come to get the engineering they, it's because the jurisdiction is requiring them to meet ASTM. In the US engineering is newer on the aerial adventure courses. So, in many cases people aren't doing it, unless they're required by jurisdiction and, um, there are a lot of our clients that are going above and beyond and getting things engineered even when they don't have to, but that's still relatively new, um, in the last few

years. Um, their clients are saying “no, we really want engineering” or they’re just trying to engineer a higher percentage of what they’re building.

M: Oh, wow. So, why do you think that is? Is that just to save money or is it that they’re not aware, do you think?

B: Um, I think it’s a couple of things. I think, you know, sometimes they’re not aware. Um, sometimes it’s to save money, but really, because they’ve not ever done it before, the biggest argument that we get is that they, they’re building these things for [inaudible] and they’ve all been working just fine and nothing’s fallen over, um, and so, it doesn’t feel like a need, um, to a lot of people even though from a, you know, jurisdictional, code, compliance, kind of, perspective, that’s really the only entity that can ensure you’re in compliance. Um, so, it’s kind of a, it’s kind of a different thing. Um, I think that as people are getting more professional and dealing with, you know, pulling permits for their stuff and, you’re dealing with, you know, something going wrong and you’re having lawsuits. As people are getting more professional, engineering is becoming more and more common, um, but back in... our firm started doing engineering back in 2010 and we were doing maybe 1 or 2 projects a year for the first few, you know, for the first year or two and now we do something in the realm of, you know, 40 projects per year. So, it’s just... um, the regulation has really spurred it along, the accidents in the industry has really spurred it along, to get engineering in and to get somebody else in the mix on the, on the design loop.

M: For sure, yes, and I should’ve asked this earlier, but is it only commercial parks you do, or do you do the, um, traditional courses, um, ropes courses as well?

B: Yeah, we do both, um, because different jurisdictions require commercial and, um, private courses to be, um, engineered. There’s, for instance, there’s one out in [intentionally left blank] that we’re doing right now, um, that’s a traditional course, that no jurisdiction requires it all, it’s just that the facility is wanting to be, you know, above the line of professionalism. And, um, I think that general contractor there, at the facility, you know, said, “No, we ought to see engineered plans”, “no, we ought to get permits”, “no, we ought to do this”, and it’s just, it’s, kind of, all over the map. We’ll do, we’ll do engineering on just about anything, but bringing people to get engineering done is, you know, it’s slowly catching on, and there’s really not that many engineers in the US that are familiar with this type of structure and so, when they’re not familiar with this type of structure, a lot of them are not willing to put their license on the line, um, to try something new. A lot of times

we'll be contacted by another engineering firm to be a special engineer, because we're familiar with the product.

M: OK. Yeah, I mean I have to admit that, um, um, this is the first interview that I've done with an engineer.

[Laughter].

M: Yeah, so it's, um, I've spoken to operators and builders and, um, public agents, um but, um, yeah, I think it's really interesting, because obviously, you come from the outside, a little bit, as well, looking in, to a certain extent, I think.

B: Yeah. Well, and I am not actually licensed to engineer. I am actually just the department manager that, kind of, speaks the industry language and I've learned the engineers' language, so I'm, kind of, a little bit of a translator between the two entities.

M: Oh, OK. Um, how, how was that for you, then, as, um, changing into the engineer world then?

B: Um, it was actually a pretty good fit for me, um, not just personality-types it was a pretty good fit for me, and I had built some structures with engineering and had had some pretty negative experiences with them, so I, kind of, know what to watch out for when the engineering starts to get, kind of, crazy and usually, it can get kind of crazy when they aren't aware of how the things are intended to be used. So, it's a little bit like being a bridge there and, you know, I've learned about what they're doing, maths-wise, but, um, mostly I'm trying to help the design stay as, you know, simple as they have been historically, except from when they shouldn't be that simple and they should be bigger be [inaudible]!

[Laughter]

M: Well, yeah. Yeah, it seems to be the case, I mean, you mentioned this earlier as well, that, um, there is this, um, this rush, you know, to have the biggest rush to have the biggest zipline. You can see it on the advertising material as well, you know, "the biggest zipline in the US" and what not, which makes it challenging I'm sure. So, um, what role, or impact, does risk management have on the overall strategy of your organisation?

B: Um, well it's got a really big impact for my department. Um, in our firm we also do engineering for buildings and electrical substations and stuff like that and there's actually a whole lot less risk, um, management procedure over there, because those are very much

known and the engineer role is one of many, many licensed people's roles, but in the aerial adventure department it takes on a, you know, our risk management procedures are very different and, um, for example, we get, we got a request for a proposal to go and inspect a new installation the other day and, um, they wanted us to only go and inspect the structure and we told them, "sorry, the structure isn't alone". You have to actually take a look at make sure that how it's being used works with what's there and they were not interested in us looking at that, so, you know, for example, we didn't take that project. Um, so we, we just, kind of, unless we can... if we're going to put our name on it, we need to be able to make sure that we can review all the components of it instead of just the structural component.

M: OK. And so, what impact would you say that it has on the overall culture of the organisation or your department then?

B: Um, I think good impact on the culture of our department. It probably doesn't make some our perspective clients very happy. They can always go and hire somebody that's going to do exactly what they want, but, um, I don't think we want to be known to for just putting our stamp on anything or putting our blessing on anything. We want to be known for, you know, raising the bar for the industry and being the professionals that we know how to be. So, you know, it doesn't mean that we get all the jobs, which is not a bad thing, it just means that people know what we stand for.

M: Yeah. For sure, yeah. But, surely that's only good for your reputation anyway, so... Um, um, so how do you monitor that the procedures, um, or I guess actually with you being an engineer, how do you monitor that the procedures are being followed, um, within the organisation, or department, but also, in terms of your clients. If you, obviously, have input on their operating procedures and so on, how do you monitor that they're being followed after they've been signed off?

B: Yeah, so, our internal one, we're, we're small enough that we can, you know, pass, we have a quality control process and review different people's stuff, um, within our own office here. Um, but our clients, we, once they complete the construction, we go out for an, a structural inspection, which is the inspection where they make sure the course was built to plan and then after that structural inspection passes, we allow them to do their staff training and then I go out for a separate operational inspection, um, after the staff training is complete and since I've reviewed all the operating documents, I have the staff that are recently trained, you know, put me through the course, show me the different rescues

they've learned, show me how they do maintenance and, um, it's usually a two-day process of, not necessarily testing them, but, you know, reviewing their operations in accordance with what we did, and usually the jurisdiction requires a letter about the structure and a letter about the operations, so that's just our process. We can only really tell, though, at the time of inspection. Um, a lot of our clients, since they've used a professional manufacturer to build it, once they, kind of, have our sign-off on the initial installation and operation, then they usually do their annual inspections through their manufacturer from that point on. So, we don't really have any way of knowing, um, about continuing compliance, um, unless, you know, something happens, or, you know, something with the course isn't working quite right and they have to call us back to do some kind of modification or adjustment to the plan-set. Um, but, yeah once we, kind of, sign off on it it's just out there, much like a building, you know, you don't really go back to a building. Um, manufacturers go back all the time, but as the engineer we get the one shot at it and that's, um, that's all we can really do.

M: So, um, you never go back at all afterwards then?

B: Um, not unless they do another project.

M: Yeah, for sure.

B: Or, unless, if they hired us to come back and do the inspection instead of the manufacturer, and we have a few clients that do that, but it's not as common as the manufacturer maintaining the client.

M: Right. And so, um, um, in your department, what lines of communication do you have between management and staff? So, I guess, between yourself and, and the rest of the crew, um, in regards to sharing knowledge on risk management.

B: Yeah. So, it's pretty direct communication, because as a department we, we keep our core group pretty small. So, it's just myself, one licensed engineer and one EIT, which is, kind of, a certification called an Engineer in Training, and, um, the engineer in training and I work together on a daily-basis back and forth. Um, me bringing projects to him and me answering questions about the project with him and teaching him along the way. Our main licensed engineer, you know, um, he manages a lot more stuff. He does the review of the work that the engineer in training does along the way and, um, a lot of the times the questions that they have are "how do they want to build it?", "what are they going to use it?", "how are they going to use it?" and, you know, "how many people are going to be

standing on this thing at one time". So, it's a pretty direct communication and, and because we only have, you know, 40 or so projects a year right now, we can manage them pretty well between the three of us, um, but when we have to pull in other resources from our office, um, you know, we're only a firm of 10, so we don't have a very big... um, yeah...

M: Oh, wow. Yeah, sorry, but from the website it looks like a massive organisation.

[Laughter]

B: We have 10 employees. That's how many you'll see on the website. Yeah.

M: That's cool. Oh, brilliant. So, um, um, in terms of learning from, um, well, I guess, with there only being three of you, how do you, um, learn from your staff's knowledge and so on? Stuff that they learn, I guess, as they, um, design the courses or... and so on.

[Laughter]

B: I learn when they say the words, "that won't work" and I say, "I doubt that's true. Let's look into that further".

[Laughter]

B: In the engineering world and something won't work when the math doesn't work out the way you want it to and something fails when it moves like a quarter of an inch. So, in the engineering world, it's kind of funny, we've kind of learned to, to readjust our verbiage, so that, you know, with these moving, you know, and flexible structures, it's, um, it's, it's funny. And, usually when I do quality control over something they've drawn or they bring something to me, it's very quickly... I have a very easy time seeing that something looks weird, um, looks like something would be hard to build or looks like it would be really hard to use that element and, um, typically we troubleshoot from there. So, internally in the office, we probably disagree more often than we let our clients know.

[Laughter]

B: So... and so, yeah, that's how, I think, we all learn, is by kind of flushing things out in the office. Knowing what the client is going to be frustrated about or, you know, questioning, "Why do I have to have such a large pole here?", or "a large piece of steel?" or "this many guy wires?". You know, it's really, it's kind of like constantly having to prove your work at work everyday here, um, and having your work questioned everyday here. Mostly, just because we're building or designing something that's not been designed very much.

M: Oh, yeah, for sure. I can understand that. And, um, you said that earlier as well, with the challenges of always having to be bigger and, um, and, and faster and so on. Um, how do you, do you find that you're constantly learning, um, new things as well?

B: Yeah, absolutely. We, um, we actually developed a zipline tool called the Zip Design Tool that does maths more quickly. It's kind of like a calculator for a zipline. With the bigger and faster it seems as though every time somebody comes to us for something bigger and faster we find some component of the calculator that we built, that now needs to be upgraded to consider something else. And, um, you know, different types cable that exist now, this, you know, compacted cable, all the different components of jurisdictions, with ice loading and wind and, you know, the way code changes from course to course, the Zipline Design Tool can be correct for a zipline if it was going in, in Texas, but can be lacking in code compliance if you used the same tool in California. So, it's, it's just kind of a constant, kind of checking our work. We've been reviewed a lot by other engineers and we've reviewed a lot of other engineers' work as well and it's pretty interesting to see how we all do things differently. Um, even in the ASTM, you know, volunteer world, at the ASTM meeting where we're writing the standards it's mostly engineers at that meeting. Engineers and jurisdictions. And at that meeting it's really apparent how little we agree on!

[Laughter]

M: Oh, really?

B: Oh, yes. Oh, yes.

M: OK. Um, do you think innovation impacts that as well? Because, there's a lot of innovation taking place in the industry in general.

B: Yeah, absolutely. A lot of the more, even if it's commercial or traditional, a lot of the courses rely on pieces, or you know, components, pieces of equipment etc. that you buy off the shelf and in the innovation realm and in the engineering and amusement device realm, a lot of the components and pieces are actually also manufactured and designed as components and that's a little bit new to, to the aerial adventure course world, where you just invent what it is that you need...

[Laughter]

B: [...] um, and the quality control that is expected if you're going to do that. That is the way the rollercoaster world has been operating forever, and so that little component being, you

know, being, it turned into the engineering realm, has definitely, I would call that innovation, for sure, but it's been, you know, hard for people to understand and accept, because all they've ever operated on is buying products off the shelf to use to construct the course.

M: Oh, for sure, yeah. And, um, how do you, as a department, how do you keep up to date with all, um...

B: Well, so, I, um, I am very active in the volunteer world. So, as a department manager, one of my main tasks is to stay connected with the industry and so I attend all the ASTM meetings and I serve as the secretary of the 29-59 task group, which is the aerial adventure park standard and then I serve on the board of director at the ACCT. So, I stay connected through volunteer roles there with the industry and, of course, go to all the conferences and do all that stuff. So, it's kind of a client, um, relational management and it's kind of the stay-on-top-of-what's-happening, because most of the time I find I'm actually educating the manufacturers because they're too busy building things to be available to go to all of the industry events, um, where people are actually developing the standards and, um, flushing out the problems.

M: Oh, wow. Yeah, that must be interesting conversations. I'm sure.

[Laughter]

B: Well, but if they trust you and they know that you're doing your research and they know your type of personality then it's not that interesting of a conversation and they don't have to believe you or ask you. So, it's actually... you know, it works out. If they're asking for your opinion or your help, it's because they know that you're heavily involved and have facts that's based on... you know, reality.

M: Oh, for sure. Yeah. Yeah. Of course. Um, so what role do you think that, um, leadership plays in effective risk management?

B: Leadership as a concept or leadership as an entity somewhere?

M: Um... I guess, as a, as a concept, um, yeah. I guess, as a concept.

B: I'd say it plays a pretty big role as a concept, um, mostly because this entire industry is dealing in a, dealing with risk and risk management and somebody has to be able to take a stand and make a statement and defend that stand and that statement. Right? Somebody has to stamp the design and somebody has to sign off on the thing to be open to the public.

Um, and I don't think just anybody can do that. You have to be a pretty confident leader that knows what you're getting into. Um, and you have to be able to convince, you know, not necessarily convince the jurisdictions, but help the jurisdictions understand why it is that you feel confident enough to put your stamp on this or put your endorsement on that. I don't think, I don't think a non-leader-type-human would be, would get very far in our industry, just because they're being asked to do stuff that's scary and, you know, brings risk to your company and that you can be sued for. You know, those, those are all things that would scare a lot of people off, but the, the confident leader that isn't afraid to figure it out is going to be the one that goes further.

M: OK. And so, um, how might an incident at one park affect the rest of the industry, do you think?

B: Um, it usually affects the industry pretty deeply, um, and from the industry perspective it mostly perfects it, um per, um, it mostly affects it through perception, and so, like if somebody falls off the course, you know, because the operator didn't clip them in, then it causes everybody else around them to, you know, know that that could happen anywhere. It also causes all the jurisdictions in that area to take a closer look at what people are doing in their area and so it, typically, has trickle-down effect into, um, into new requirements. Um, and new requirements sometimes come in the form of standards, but more often than not they're coming in the form of the jurisdiction actually requiring you and holding you accountable to that standard. Um, a standard is only voluntary until somebody tells you, you have to follow it and so when an accident or an incident happens it trickles down through jurisdictions directly to the owner/operator of the course and the manufacturer that built it. Yes, there are lawsuits that come about from that, but I think it's more the immediate effect of, kind of, a new rule that has to be enforced everywhere, you know, as a result. North Carolina was a great example of that. You know, they had two terrible accidents in short space of time a couple of years ago, the media went bananas and they, you know, have been doing all sorts of regulatory, um, stuff since then. Tennessee is another one. I mean, California, Forest Services in general. They just, all, you know, everybody is kind of learning how to regulate these things and, um, it's still more often than not regulated, but the ones that are trying to regulate it don't get it right the first time. So, they're having to struggle through kind of what doesn't work, um, together whenever there, um, an accident happens.

M: Do they, do the states, do they try to do that in conjunction with the industry or is it more...

B: Mmm. Sometimes. Um, yeah, the answer to that is: sometimes. There's sometimes, sometimes the state will come right to you and say, "we have these things all over our state, we need to do, we need to do something, can you please help?" and that would be where they would go to ACCT and ACCT have some draft legislation that usually you can give them to start with and then they go through it and learn about it and like some things and don't like the others. Um, other states, though, don't want anything to do with the, um, with other peoples' opinions, because they had this one incident that triggered this whole thing and, um, they basically go in and they immediately clump you under amusement device, which is probably appropriate, it just hasn't been done before, but when they do they hold you to all the rules of a rollercoaster, which aren't always as, as easily interpreted from across structures, so... and legislation's slow, right? So, they'll put up these letters that aren't technically regulation or, or law, but they'll put out these rules and you'll have to follow them and they'll be in the process of making it law, but it can take a long time to make something law, but you still have to follow it along the way, so you, kind of, ride the wave a little bit.

M: How does that affect you as an engineer as well, if it's not quite in law yet, but might change down the road?

B: It means that everything we design, we design as best we can to meet ASTM and ACCT and, you know, the states. We put in a lot of preparation for something coming down the line, one day in the future and we want our client to be, you know, as prepared as possible for knee-jerk regulation whenever it comes about. The Forest Services is a perfect example. They have regulation that is law and it still changes every year, unofficially.

M: Every year?

B: Every year, yeah. It's just they learn stuff they didn't know yet. You know, every year they learn it and every year they try and find a way to incorporate what they've learned into everybody. So, they're trying to be consistent with everybody, but they're also learning as they go. So, it's a tough thing to do and you don't want to just stop the progress. You want to be involved, know the people and help them interpret what it is that they've run into along the way. So, that's, I mean, we probably stay closer to our regulatory friends and our other engineer friends, than we do to our manufacturers sometimes, because they're

the ones that are having to constantly having to make judgment calls about what manufacturers are putting out there and we've got to coach them through it and they've got to ask our opinion and, you know, it's more a relationship than it is a, you know... regulator to the engineer.

M: OK and so, um, Forest Services is that, is that a federal department rather than a state department?

B: It is. It's federal and it's interesting, because the federal department has the regulation over the aerial adventure courses, but in order for a permit holder of Forest Service land to get to the federal level they have to go through the local level to file for permission to build the thing and all the different local levels are even more inconsistent, um, with, with how they deal with these things, because it's all about, you know, how it's going to affect tourism and how it's going to affect the landscape and how it's going to affect the forest and, um, it is, it's just a tricky pathway, um, to go. But, it is a federal, it is a federal regulation, um, if you're on Forest Services land.

M: Oh, OK. Yeah, that sounds like a nightmare.

B: Don't matter if you're commercial or traditional.

M: Right, right. OK. Um, I wasn't aware of that. OK. Well, so do you, well you've already mentioned it briefly, [intentionally left blank], um, but so you collaborate, um, with other people within the industry as well then, I assume?

B: Absolutely, yeah. Our biggest collaborative partners, because we're an engineering firm, most likely, it would be other engineers and we have, probably, 3 or 4 other engineering firms that we talk to on a fairly regular basis. We see each other at the, um, conferences and the task group meetings and then we collaborate very heavily with the manufacturers that we work with. Um, and our goal is to bring those manufacturers in and make it easy to engineer everything as they move forward with their business and we, you know, don't want them to be afraid of engineering or only do it when somebody requires it. So, our big thing is to really invest in them and to teach them a little bit about why, you know, it's complicated on our end and why it's hard to meet code in each jurisdiction and stuff like that, but to basically get better at it with the way that they like to do things and integrate it into their daily practice. Kind of like we're an engineer on their own staff, is how we'd like to be viewed.

M: Right. OK. And so, do you, um, is it mainly through the conference that you collaborate? I mean, how many conferences are there? Is it just the ACCT or?

B: Yeah, it's not really mainly through the conferences. The ACCT conference is once a year. It's at the end of January or beginning of February and we see our clients there, but we don't do any work there, mostly because when we're there we're all getting new clients. Our manufacturing clients are getting new owner/operator clients, our... you know, we're learning about new manufacturing clients. And there are workshops that we go to, but when you go to those workshops it's not a collaborative process, as much as it's an educational process. So, the collaboration really comes after the conference, when they have a project and, you know, they want to work together on it and we, kind of, start from there and build into doing all of their engineering on all of their projects moving forward. I would say a whole lot more of our work in collaborative happens the week after the conference.

M: Right, OK. That's interesting. So, what do you think, then, are the benefits of collaborating?

B: Um, I think there's a bunch of benefits. There's no way that any of us are ever going to be everything to everyone and so the benefits of collaborating is being able to develop a team that has all of the expert credentials that are expected from a professional standpoint and, um, you know, the engineers don't want to swing a hammer, the builders don't want to do maths, you know, nobody wants to do paperwork and to try to...

[Laughter]

B:... deal with jurisdictions and so, the only way you can really put out a complete project is through collaboration and we, we like to sometimes call ourselves the 'ride engineer', which is a little bit different than the regular engineer. The ride engineer looks at all the parts and pieces and all the work of all the other engineers on the project to make sure all those parts and pieces are compatible with each other and that the collaboration has worked. So, that's a little bit more of the high level perspective that we're trying to do, but we can't do that without all the other pieces. So, you, you're going to have an arborist if you're going to use trees. Nobody else in the mix is going to be qualified any decisions about the trees and that arborist needs to know what the heck he's signing off on before he just signs off that the trees are alive and healthy. You know what I mean? "This tree is going to hold this much weight, this often, during these seasons" so on and so forth.

M: And so, do you, um, I guess this is not your courses as such, but do you still feel comfortable sharing sensitive, um, information with, um, other engineers or, um, new clients as well, that you've learned, new information that you've learned from previous jobs and so on?

B: Yeah, I'd say the information is not actually that sensitive in the engineering realm, just because it's so black and white. Um, but, not very often are we actually discussing accidents or incidents or, you know, oper, like, operational problems, but, we're... the things that we learn from are mostly disagreements. And so, you know, the disagreements are, "we designed it this way and they didn't like that because of XYZ", you know, "what is your preference? Um, from an engineering perspective this works better, but from your perspective you would prefer this and if you do this, these are the consequences of that". So, I would say, from that perspective there's, there's not much sensitive information. I mean, I guess, if we had a tough client we probably wouldn't bash the tough client to somebody else entirely. But, that, that's just a personality, I think, that's not an evidence thing.

M: No, no. No, for sure. Um, so, um, bearing that in mind, what do you believe is required for collaboration to work?

B: Um, I think everybody has to agree on the outcome and, you know, that's, that's the main thing. Um, everybody has to know where we're all headed. And, if you've got groups that are all headed in different directions, then, you're really not collaborating, you're arguing.

[Laughter]

B: So, um, that's that the biggest piece to us. In a typical project we have us an engineer, we have us an operational reviewer, we have the manufacturers, the designers, the trainer and the equipment supplier, we have geotechnical engineer, we have a surveyor, we have an arborist, we have a jurisdiction... you know, you can have 7-10 entities in one project and as long as everybody is there to see that this project makes it through the hoop and gets opened, then we're on good shape, but if anybody's part of that project, doesn't want to get this thing open and make it the best for the public, you're actually going to have a really hard time getting there.

M: So, do you think that these requirement, you know, largely, do they exist, you know, currently, um, in the industry?

B: Do the requirements for collaboration exist?

M: Yeah.

B: I think they exist. I would say that they're not as common as they should be. Um, there are still a lot of people out there that do think that they can offer the entire package with nobody else's help and that's got some ego in it, um, but doesn't mean it doesn't still exist.

M OK. And do you find that, um, with a lot of the operators and builders, and I guess yourselves, are small-to-medium enterprises, obviously, um, that has an impact on, on time and money, um, do you find that that's, um, a challenge to, um, collaboration in the industry as well?

B: Yeah, it is. You know, we've had a couple of difficult projects this past year where not everybody was headed in the same direction. I honestly believe there were a couple of entities that were involved that were trying to keep it from getting open and it, um, it cost a bunch of extra time, um, and we had to approach that with our client and charge for the time on top of, you know, what was budgeted for, because these other entities that were involved who were involved that didn't have the same goal. So, I don't quite know why. Um, I think in general, a lot people who are having a hard time with the aerial adventure course world are coming from the rollercoaster world and may want the aerial adventure course world to line up exactly with the rollercoaster world and when it doesn't they feel like they ought to keep it from existing and so it's really difficult to speak, you know, those, those two languages haven't really figured out how to talk to each other yet and I think that's probably why we hit, you know, two, two tough projects this past year that took a lot of time and energy and they just weren't fun to work on and that, um, and that, that was a little bit of a problem. But, I, I think it's just because engineering is so new and it's not new on a rollercoaster. Everything is black and white, um, but it's also not a rollercoaster that we're designing. So... they're very different.

M: Do you think that happens a lot? The resistance. Or...?

B: I think it does, mostly because everybody's afraid. Um, like I said earlier, a jurisdiction would give resistance because they're afraid of signing off on something they don't know enough about and state engineers are resistant because they're afraid of signing or stamping something they don't know enough about and so, instead of learning about it, a lot people argue from the perspective of what they know.

M: OK. Right. OK. So, um, how can you, how can you motivate people to be more collaborative then?

B: Um, well, I, I think the way we motivate people to be more collaborative is to help them understand that this is what we do everyday and this is something we can figure out and that we all want the same thing. Um, and that if they're afraid of it, um, then, you know, let's find out what makes you afraid of it and let's look further into that. So, a lot of the times, a lot of the times, just getting to know each other a little bit better is helpful, um, from that perspective. Um, but, you know, some people are just not ready to imagine anything different than what they're used to, um, and you just go through it and hope for better the next time.

[Laughter]

M: Yeah, sure. Um, do you think that having more conferences, um, help to broaden peoples' minds, would that help?

B: I don't think so. Some of the minds that are not broadened yet are the ones that refuse to go to the conferences to see the bigger picture. Um, that's, that's the piece. Usually, the ones that you argue the most with are the ones that, that aren't involved in the industry as a whole. Um, they don't, like they hear that it exists, but they don't actually, um, they don't actually value its existence. Um, they value their own perspective and history more than that.

M: They don't think that they need it, basically.

B: Yeah. Yeah.

M: OK. Um, so do you think that, would it be beneficial to create, um, almost like an industry-body with the sole focus of, um, working on risk management in the industry?

B: I don't know. All these different bodies that exist, um, can actually conflict with bringing the industry together in general. So, you know, there are more bodies than we know what do to do with right now and it's, it's a little bit, you know, we can create all sorts of new stuff, but it doesn't help to create place if you don't have... like, the... the collaborative need identified. Do you know what I mean? The ACCT is interesting, because it's already a place that we all meet up, but every time you all meet up, instead of all meeting up and high-fiving each other at how great it is, you get, you leave ACCT with all the things it's missing, like it will never measure up. So, it's a process of ACCT getting better or people

understanding ASTM isn't about anything besides standards. Like, they want to go to ASTM and learn and you're like, "well, that's not what ASTM's about". ASTM is actually about standard development, all the time, every day. And, well, if you're not interested in that, it's not going to meet your needs. But, it's, I don't know, you know. Every time somebody jumps to the conclusion of creating a new entity I, I just kind of throw my hands up in the air and say, "why do we need another one? Who's going to run it? Like, who's going to go to it? Where's the need? Where's the evidence that there's all these people that are going to sign up the moment they get a chance?"

[Laughter]

M: Right. How do you create that place then, that you're... or does it already exist then in the ACCT, um...?

B: Yeah, I think places already exist and I think if, if you want, if a new place is needed it will organically be created by a lack of something at these other places. Right now people can barely get to the places that do exist. Nobody has extra time to devote to collaboration, you know, because they're actually running very successful businesses. Um, and every, everybody has plenty of work right now, everybody has plenty of patrons, everybody has... it's a time of plenty, it's not a time of, you know, need. So, I just don't know that more trips and more locations meet that need, because then you're not actually running your business, which is the main thing you're trying to do.

M: Yeah, of course. Yeah, time is a major issue for many, most stakeholders in the industry.

B: Yep. It, it really is. I mean, the number of days that most of them travel and the number of days and hours they work in a row. You know, being a part of the leisure of industry is, is, is very different than an 8-5 Monday through Friday job. Basically, the majority of the people in our industry don't have anything close to an 8-5 Monday through Friday job.

M: Right. Right. Yeah, I can imagine. With them being, being small businesses most of them as well, right, so. Um, so you already talked about that you work a lot with the government as well. Um, is it beneficial, do you find it beneficial, um, how they, they approach risk management in the industry? Do you find that you have to educate them a lot, or...?

B: You do have to educate them a lot, but you have to educate everybody a lot, right now. I have to be educated a lot. Every jurisdiction is different and how their political process works for that state or for that entity, or whatever, is different. You have, I have to learn just as much as they have to learn. And so, it's a lot of times just that relationship that I was

explaining where you kind of find out what it is that they're expecting and you tell them a little bit about what you think they should be expecting and you work out where you're going to land in the middle.

M: Right. OK. And, and do you, do you think it would be more effective if it was a, on a fed, federal level or do you think the state level is the most efficient way?

B: I don't think it's going to be more effective at any level right now, because regulating this industry is still so new. Um, if there was a state that was doing and they all thought they had the answer and it was easy, I think that other states would be looking to them. Right now every state feels a bit like it's a mess, um, even though they're trying. And a lot of people just default to say, "Whatever California does we're going to do", because California is usually pretty strict and the hardest one to meet, but California knows that their process is a bit of a mess right now. I'm not sure if it happened at a federal level, if the states would... I'm not sure if it would be beefy enough for the states to, um, adopt it in its entirety. I think the states would still add their twist to it, based on their own state's experience. I, I just, it's so new. I don't know. I mean, probably when elevators first came out it was, you know...

[Laughter]

B: [...] little by little the gov, the federal government probably didn't jump in right off the bat and said, "Yeah, we're the experts". Right now, nobody feels that they're the experts. Really. If it's you, you're probably wrong!

[Laughter]

M: No, but it's true. Because, that's, um, that's what I've found so far in my interviews, is that, you know, nobody really feels like an expert, which is interesting, because you guys have all the knowledge, I think, anyway.

[Laughter]

M: So, but, yeah, that's the problem, I guess, with, with a new industry. Um, so bearing that mind, kind of to round up, [intentionally left blank], how, or what direction do you think the industry is headed in? What do you think it's going to be like over the next 10 years?

B: Well, I'm really hoping that the industry is heading in a direction of professionalism that is consistent with the amusement device world and the regular building code world. Um, I don't think there's any way around it. I just think it's going to be a process of getting there.

You know, everybody's going to have to build these things with engineering, everybody's going to have to get a permit, everybody's going to have to file for some kind of permit in their own state to recognise that they've met whatever requirements that the state is requiring. I just, um, once it becomes normal, we won't even remember that it was hard, um, but, you know, everybody has to go through the hard part of it before it gets more normal. Now, it's getting more and more normal to just do engineering and that's just within the past 6 years. Um, our clients don't even bat an eye anymore, they're like, "yep, OK. So, I've got this project that's coming up. I'm going to need you guys to give me a proposal" and we say, "OK, no problem", whereas, the first project was, you know, quite a step to get over with each other, but, no, it's getting more normal every day and I think, you know, there's always going to be nay sayers that want it to be like the good old days, but I have a feeling they're probably not going to get their way.

[Laughter]

M: Yeah, it doesn't seem like it, no. Um, do you think it's going to continue to grow, like it has in the last few years, or...?

B: I do think it's going to continue to grow, yeah. I just don't think you're ever going to give people enough options to be more than they are and this is an example of something that people can go pay for and they make them, they leave there feeling more than they were, before they got there, and you can't, you can't package that up any other way, except for through experiences and, um, you know, amusement parks haven't gone away and they're all over the country and they're building a new rollercoaster all the time and it's not because the rollercoaster's any different.

[Laughter]

B: But, it's because, you know, that experience, that, that leisure experience is packaged up. The only thing that will hurt it is if the economy has a problem again, because your leisure and fun money doesn't get spent whenever your money is tight, so I know that that was a tough time for the industry, when people weren't spending money, money on, kind of, fun and leisure.

M: Right, but a lot of these locations and these parks, um, a lot of them are not even in tourist attractions and such, are they? Um, so, they'll get the locals as well won't they?

B: Yeah, that's half the draw too, you know. You're going out. A lot of this stuff, the reason these are outside is so that people get to experience nature, while they're doing it. You

don't get to experience much nature at a big Disney Land park, but if you're going out into the woods. You know, that's why the Forest Services are such a boom right now. These summer operations of the ski resorts are just [inaudible] through the roof. People are afraid to ski, but they're not afraid to ride the chair lift when it's nice and sunny and go up to the top of the mountain, to experience nature and maybe ride a zipline or do a challenge course.

M: Yeah, very true, very true, yeah. Um, and it gives them a nice stream of revenue throughout the year. So, um, [intentionally left blank], that's um, that's all I have. Thank you very much, um, for all your answers today!

B: Yeah, no worries.

M: Um, do you have any questions or...?

B: No, are you going to end with, like, a report? Like, what's your final product from your, from your thesis?

M: So, um, I've got to analyse all the interviews and then, um, basically conclude from that and, um, yes it will be a study, um, a thesis essentially, um, submitted, hopefully, around June if everything goes well and then, um, I'd like to get some publications out of it, you know, for my own benefit, but also because there isn't many publications on the industry neither. Um, so, um, that's, that's probably me tied up for the next, um, 6-8 months or something like that, anyway.

B: Alright. Great.

M: But, yeah, thank you very much, [intentionally left blank], very much appreciated!

B: No problem. Best of luck.

M: Thank you very much. Have a good day.

B: You too.

M: Bye-bye.

B: Bye.

Call ended

Participant 9 Conversation

B: Participant M: Me

B: Hi, this is [intentionally left blank].

M: Hi, [intentionally left blank], how're you doing?

[Laughter]

B: Hi, Marcus. I just realised I needed to cancel a flight. I had a few minutes before it was going to be permanent. So, I apologise.

M: Oh, no, that's alright.

B: So, I was like, "oh no, I need to get on the phone and call this person".

M: Yeah. Of course.

B: Um, so I apologise about. How's, um, how's your day been?

M: It's been good. Um, very busy. I'm in the process of, well, I transcribe and try and analyse, um, at the same time as doing the interviews, um, to, to really get an idea of, you know, the deeper data that I'm getting. So, it's, so, it's pretty full on at the moment, especially with graduation this summer. So, there's a lot going on.

[Laughter]

B: Yes. Now, where are you located?

M: Well, physically, um, I am live in, in, um, Nottingham in the UK. Um, the university is in Manchester, so it's about an hour from Nottingham. I don't know how familiar you are with the UK?

B: Um, a little bit. I know that general location, so, yeah.

M: OK. OK. Have you been to the UK?

B: Um, I've spent a little bit of time, not enough though. Um, I'll be honest.

M: No, that's alright. That's OK. How about your day? How's that been? Busy, I presume.

B: Busy. So, it's got to be quite late in the day, um, for you right now?

M: Yes, um, so it's twenty to seven, um, in the evening. Um, but that's, um, I mean, like I said on the email, I was very happy to do the interview at, what would've been, two o'clock in the morning for me, you know, if that's what works for you.

[Laughter]

B: Oh my goodness! No, no. I would never want that for you, so I'm glad we're able to make that work out for you.

M: No, yeah. Um, so, um, just before we start, [intentionally left blank], I just, um, want to run through a couple of, um, checks with you, if you like. I am, I'm recording the conversation, which, um, like I said on the email, I'll send a copy of the recording to you after we've spoken. Um, do you do something like Dropbox or...?

B: Yeah, I have that. I can do Dropbox or, um, a variety of different [inaudible], but if Dropbox works for you, that's just fine.

M: Fantastic. Yeah, um, because, generally the files are about 70mb or so, so it's, so it's a bit too large to email. Um, and of course, um, you know, if there's a certain question you want to answer, um, we'll skip that. Um, and, um, but it is confidential. If there is any potential, um, identifiers, um, in what you're saying, um, I'll basically just leave it out from the transcript completely. Um, but once I've transcribed the interview, I'll send a copy to you, well before I submit the study as well, so you can, um, look through it, if you like. Um, yeah, and that's really it.

B: Great.

M: Yeah, so, good to go?

B: Yes.

M: Do you have any questions or...?

B: Um, no. I'm, um, I'm excited to help you out.

M: OK. Fantastic. Um, so please tell me about your role, um, within the organisation.

B: So, um, my role is I oversee, um, operational, um, operations procedures, training and risk management for, um, all aerial adventures as well as other non-skiing activities, um, within the resort.

M: OK. OK. And so, um, do you have both, is it just commercial parks you have or, um, is it, are we talking for educational purposes as well or...?

B: So, that's where we are a bit unique. Um, we are, we are mainly commercial, but we are bringing a strong component of, um, environmental education and, um, what we call 'learn through play' into our commercial operations. So, um, we, we would call that our branding of our commercial operations, um, is that, um, we do bring a very substantial portion of educational content to the commercial market place.

M: Oh, wow. Um, just out of curiosity, um, how do you do that, [intentionally left blank]?

B: Yeah, that's... um, so we actually call it our [intentionally left blank]. Um, so, um, we have everything from, you know, mountain coasters, bungee trampoline, aerial adventure parks, canopy tours, um, zip, um, single-standalone ziplines, um, um, netted challenge courses, harnessed challenge courses, um, a variety of different programs, but then we also, um, um, one we try to do it with the interpret... um, um, like on our canopy tours we definitely bring it in through the interpretation side and guiding side, um, of the activity, but, um, bringing out, um, the tour actually is quite an event, explaining what they're seeing and what they're doing and experiencing. But, then we also have, um, um, through our [intentionally left blank] branding we're trying to bring about, um, awareness of the mountain environment. Um, and we have a variety of different, um, kiosks and other things, both scattered throughout, um, the area that we have these activities, as well as the queuing line, um, to integrate the feel of being at the mountain, um, the feel of connecting with the mountain. Um, both, um, as they transition from activity, activity as well as waiting in line, more than just activity. Um, so a way to describe it is, you know, when you go to Disney Land or another major theme park, you're surrounded by an atmosphere of, you know, Disney Land, right? So, you feel like you're there and whether you're waiting in line or whatever, you're engaged in the process of being at Disney Land. Every little nook and cranny is physically connected.

[Laughter]

B: Right?!

M: Yeah, that's very true.

B: And so, what we've done, instead of Mickey Mouse and other things, we're theming it with what the theme is, which is mountain environment. So, wherever you go and look, um, we're trying to point out, um, vistas and scenery, um, important geological features as

well as the animals that inhabit the mountain. Um, so we have everything from, um, both, where it might just be something where it's, um, a mountain silhouette that lines of with the mountain view that you see and the names of the mountains, um, and some brief geographic history, um, to, um, we have things where, um, it's very interactive, where we have on that, um, we have a whole series that we call 'animal abilities' and so they're the different abilities that, um, the animals on the mountain have and they're interactive. One is, like, [inaudible], is what we call it.

[Laughter]

B: Um, real technical. Um, but it's a giant, um, bronze shaped ear of a deer that you can hold your hear... your ear up to and it simulates the amount of sound that a deer will hear and so you can hear people whispering, you know, a few hundred yards away, um, through this and it really helps putting into perspective the power of the, the hearing of a deer. Um, we have other abilities such as, um, you know, um, the porcupines defends on the quilts...

M: Oh, wow.

[Laughter]

B: [...] to, um, the, the, the ability for bears to smell, um, and, and a variety of things. Um, we call those 'animal abilities' and they're, um, scattered throughout the area as well. So, that's how we've gone about trying to, um, engage the participant with the educational senses as well as the, um, pay-to-play.

M: Right. That is so cool. I, I love that, honestly, [intentionally left blank]. Um, I have to say, of all the interviews I've done, so far, it's the first time I've heard anyone do anything like that. I think it's, um, um, like you said, very unique, but I think it's very good, um, thing to do as well to mix it with education. Yeah. Oh, fantastic. Um...

B: Yeah, we are, we are definitely trying to push the boundaries of what is, um, what is possible with, with the activities and the educational side.

M: Do you get a lot of schools as well at your park?

B: We actually do. Um, we have a number of, um, schools that visit during, um, the late shoulder season and early season. We tend to really only be open for the summer months, um, being a ski area mountain. Um, so we, we struggle to have year-round programs for the schools, um, but we definitely see them come early season and late season, um, for us.

M: Yeah, yeah. Well that, um, yeah, I bet that's an easy sell as well, um, in terms of the, you know, with the education as well, for them to release the school dollars, or trip dollars, if you like, for that.

B: Yeah, so we, we pair it, um, typically... we have, um, either, um, we, we partner a lot with the US Forest Services and so they provide, they help us provide a lot of the educational curriculum and content.

M: Oh, OK. Oh, that's, that's a brilliant partnership there, isn't it?

B: Yes, it is. And since it's their land, they have a vested interest in making sure people know it's their land, a vested interest in unders... in, in educating people about their land.

M: Oh, so you actually operate on their land?

B: Correct.

M: Oh, OK. Um...

B: So, that's a really unique aspect of the, um, the, the United States and the western ski areas, is that the vast majority of the western ski areas are located, um, and operated on government land, um, permitted to, um, for operation. So, the company has, holds a permit to operate on their land.

M: Do you have to, then, um, do you have to adhere to federal laws or state laws?

B: Um, both!

[Laughter]

M: Right. Oh, that's interesting, yeah.

B: Yeah, so, yeah, we actually do. So, um, we're in, um, the company I work for, um, [intentionally left blank], is in, um, let's see, um, for our summer activities, we're in, currently, um, 3 states and two countries. So, we're both in the United States and Canada.

M: Oh, wow, OK, yeah. Wow and Canada as well. Yeah, that's massive. But, so, yeah, again, it's a first time that I have spoken to somebody who's on federal land as well. Um, so I'll probably have some more questions for that later on, but, um, so how long have you been involved, um, in the aerial adventure industry?

B: Um, I started, um, my first job in the aerial adventure industry was back in 1998...

M: Oh, OK.

B: [...] so, quite a few years.

M: Yes, quite a few years. Um, and obviously the industry, um, has changed a lot, I guess, in the last 10 years, or so. Um, what do you believe is the key attraction to the aerial adventure parks?

B: Mm... I think the key attraction to aerial adventure parks, um, in general, um, is, um, um, I think people are looking for, um, a way to be, um, I think that people are looking for a way to, um, engage and challenging themselves and I think, um, in this day and age we've removed most... um, most people, um, have to seek adventure and challenges through recreation and so, um, their day-to-day life does not provide that anymore. We're not being chased by bears or, um, other things.

[Laughter]

B: So, um, you know, um, we're forced to, um, get that gratification, that satisfaction, um, through thrill-seeking, um, like rollercoasters, or, um, hobbies, like, um, rock climbing. But, I think, what aerial adventures brings, um, is it brings the sense and accomplishment of a more traditional sport, like rock climbing, in a much more palatable, um, format to the masses, um, because it's, it's more accessible and easier and has, um, a perception of being safer.

M: Right. Yeah, yeah. OK. Um, and, so, what role, um, do you believe, because, obviously, people are attracted to this, you know, thrill-seeking side, or a lot of people are. Um, how important do you think that is, um, in the overall attraction, this role, between the risk and the thrill-seeking, um, that the participant desires?

B: I think, um... I think, um, the, the risk, um, the risk is not as important as the, um, the, the thrill of the activity. I think, um, and I think that that's the attraction to it. Um, I think the risk is low, but the thrill is high. So, um, I think the bigger draw for the activity is that challenge and the thrill. Um, "can I accomplish it?". Um, I think, if you look around, um, people are looking to push themselves, um, in, in many forms. Um, if you just look at the popularity of, um, game shows for decades, right?

M: Right.

B: So, um, I think human nature is to challenge oneself and this is just a new form of challenge for individuals.

M: Yeah, because, I mean, in many ways, um, would you describe it almost as an illusion of risk that your, the participant, um... wants to have this really, but obviously doesn't want to get hurt, so it's really on the operator, I guess, to create this experience where they won't get hurt, but obviously, there is this adrenaline rush, um. I mean, my research, so far, has come across as describing this as an 'illusion of risk'.

B: Yeah and, and I think there is actual risk. I mean, you know, there is actual risk when you get on a roller coaster...

M: For sure.

B: [...] there is actual risk when you enter a car and I, I caution to say 'illusion of risk', but I think the end-user believes they're entering a safe activity, right? And, and that is why they do it. I think, I think the popularity of the event would be, um, extremely limited, in the number of people that participate, if there was actual risk.

M: For sure. Yeah.

B: Well, I mean, which... let me rephrase that, because there is actual risk, always is, when you [inaudible] somebody, but, um, if they truly believed they were going to get hurt.

M: Yes.

B: Right? If they, if they believed they were going to get hurt, they would not participate.

M: Obviously, yeah, yeah, of course and that's absolutely right what you're saying. Um, now... and that's what I find fascinating with this activity, is that there is this, um, it's almost like a weird relationship, um, with risk, um, because, it's, it's, it kind of merges with the thrill and so on. So, how would you define risk?

B: Um, great!

[Laughter]

B: In aerial adventure or just in general?

M: Um, in aerial adventure.

B: OK. In aerial adventure, I think... interesting. Um, I think at a commercial operation, in this day and age, um, there, there will always be inherent risk that are unavoidable. So, um, one example we would use to describe to the participant of an inherent risk that is unavoidable: on a zipline, we cannot control bugs or birds or other things that may collide,

um, with you whilst you're ziplining. Um, and it is an inherent risk that participants must acknowledge and take on. Um, but I believe it is the organisation's due dilig, due diligence and, um, responsibility to make sure the mechanical-side of the device is functioning in a safe manner. Um, and I think in the aerial adventure that gets messy when you start to talk about, um, self-guided participant activities, more like the true aerial adventure courses, vs. the ziplines, where the participant is in control of their own actions, actions, movements of their belay systems and things of that nature. So, I think, with aerial adventure, globally, between ziplines and challenge courses, um, I would define, um, I would say in a commercial setting, compared to an educational thing, there's a higher due diligence to ensure that the participant's inherent risk is mitigated to the fullest extent, like any other amusement attraction.

M: For sure. Yeah. OK. Um, and you just touched on this, briefly, [intentionally left blank], but, um, do you do self-guided tours or, um, um, do, do you have people up on your aerial adventure parks as well?

B: We, we have, um, so on the aerial adventure parks we have staff monitoring, um, but the guests do, um, use a, um, a, um, you know, a Bornak or a ClicIt or whatever style, self...

M: Like a smart belay?

B:... um, belay system that they transfer, you know, and it is... um, it does reduce the risk of double unclips by having communicative lanyards and I would say, that's why I say in a commercial operation we have a due diligence, um, to ensure we take every measure to reduce the chances of participants, um, hurting themselves, right? With technology and supervision, but I do think, um, and so I think that's, that's our responsibility. So, we have, um, I'll be honest, we have guided tours somewhere, we have non-guided and we have self-guided.

M: OK, Yeah. And so, um, as an operator, um, what types of risks, I mean you've just touched on it briefly actually, but what types of risks do you face, I guess, from the customer side and your products as well and so on?

B: Um, so I think, you know, I think the risk that we're always trying to mitigate is, um, we would have, we would, kind of, break them down into the physical structure, the mechanical risks, right, the, um, the actual, um, actual aerial adventure park structure from failing, we would see that as a risk that we need to manage and risk. Um, we could have equipment risk, so equipment malfunction. That could be, um, zipline brake systems,

communicative lanyards that we need to mitigate and, um, deal with. And then, um, we have staff risks. So, um, risks that are inherent with the human factor of, um, employees. So, um, that's the risk of them not doing their daily inspections, checks, maintenance and other things, um, or doing the proper supervision that they're supposed to or proper instruction. So, that's on the staffing side, um, and then we would have risks that we deal with in the participants themselves, their choices, their decisions, um, that we're trying to manage and mitigate, um, either through clear direction, observation and correction and/or, um, by, hopefully, using technology to, to eliminate their own risks as well.

M: Right, OK. OK. So, um, what do you think are the key challenges that you face in, um, your risk management?

B: So, um, I think the, the key challenge, which is hard for, um, the average consumer of this product to understand, is that it's their actions impacting their own safety. So, um, this is where the aerial adventure greatly differs from the traditional amusement park ride, um, which is, by definition, one of the areas that people don't associate with. Um, I think the general consumer believes that, um, getting on an aerial adventure park is, is and has the same safety as getting on a roller coaster.

M: Oh, right. I see what you mean, yeah.

B: So, um, but, yet they have far more control of the experience on an aerial adventure than they do on a roller coaster. So, I would say the most difficult aspect that we deal with, um, from a risk management end in our aerial adventure parks, is the participants themselves, um, choosing to try to run through the course versus walking through the courses increases the risks. Trying to jump off something, um, which they may or may not really need to do.

[Laughter]

B: Um, trying to, um go, you know, managing, you know, where they connect or how many people connected to activities, um, how many people are on the belay line, over-crowding. Those types of things all have the participants' responsibility and so much of the safety, or not much, there's a component of the safety that relies on the participants themselves that they may or may not fully understand.

M: OK. I, I assume you, so do you do training before they go up on the course?

B: Yeah. And so I think that's, you know, we do try to mitigate that with training and direction, um, and then we try to also mitigate that through observation and correction on the course.

M: OK. So, um, bearing that in mind, what does effective risk management look like to you?

[Laughter]

B: I think, um, effective risk management is layering. Um, accidents don't happen due to one single failure. Accidents happen due to a series or chain of failures, um, in my mind, and so, I see effective risk management as layering, um, procedures and, um, protocols in place that creates a layering system, um, that protects and monitors those policies and procedures. So, how I would explain that in greater detail is that, um, you have your front-line staff do their daily checks, um, you would have your, um, maintenance staff that, maybe, do weekly double-checks of what the front-line staff are doing on a daily basis and then you may layer a, um, a, in our case, we've layered a level of health and safety audit on top of that, that are not operators, um, or maintenance, and they would, um, evaluate the, how well the department is doing in following their policies and procedures. Um, we would also layer in a layer of, um, internal compliance, so that would be legal. So, "are we meeting all the legal standards that we need to meet"? And then we would also use third-party auditors to come in and evaluate, um, and both our op... and we do it both on our physical structures and our operations. That's where we, we're a little different than most aerial adventure providers, when they bring in a third-party auditor. Um, that auditor typically only focusses on the...

M: On the courses, right?

B: [...] we typically have a program review by the auditor as well as our policy procedures.

M: Fantastic. Um, so and the health and safety audit you just mentioned, is that an internal one or is that an internal one or is that a third-party as well?

B: Yeah, being the size of an organisation that we are, we actually, um, each, each location, so, since we have multiple locations, um, has a health and safety team and that health and safety team at that location would provide that audit.

M: Oh, OK. OK. So, um, so really, um, your approach to risk management is like an all-encompassing, um, approach to risk management, really.

B: Correct. So, I mean, yeah, so we would have, and that's why I say it's layers, right? Um, you know, your first core layer, and your first line of defence, is your front-line staff. Right?

M: Yeah, yeah, yeah.

B: But, making sure your front-line staff are doing their job, so that would be, you know, in the, in the realms of inspection and, and physical structure, the next layer out is your maintenance team, who's taking care of things, and they would do, you know, maybe weekly or monthly maintenance and inspections, um, outside of your front-line staff, and then, outside of that, we would have health and safety who would be evaluating both maintenance and operations, um, from, um, the ability to follow procedures and they would both look at both the operations as well as, um, employee safety. So, we look at both, um... our health and safety is a bit unique where, um, employee safety looks at, or health and safety looks at both employee safety and guest safety. So, we do those both jointly and together. Um, so they would, they would audit that, and then our internal compliance is our legal team. Um, we have actually a department that is internal compliance, which is compliance, since we're a publicly traded company, we have to be compliant. Um, and so, there's a whole bunch of legal things with that. So, our legal team would come in and do an internal, or a, yeah, an internal audit of compliance for, in our realm, we would be following, um, compliance with both the state and federal standards and they vary by state. So, um, [intentionally left blank], we have to follow [intentionally left blank] amusement code and in [intentionally left blank] we to follow [intentionally left blank] Amusement Code and in, um, um, [intentionally left blank] there is no state or federal so we just have to, um, follow the ASTM standards, the amusement standard and then in, um, [intentionally left blank] we're required to follow the [intentionally left blank] standard.

M: OK. Wow, OK. So, um, different from state to state then, basically.

B: Correct.

M: Um, that must present some, um, challenging, challenges and, um, yeah...

B: Thankfully, they, well almost all of them, point back to the ASTM amusement standard. So, so, while they regulate them slightly different or they have slightly different nuances to them, they all pull, um, from the same kind of amusement realm. [Intentionally left blank] is the unique one where it also does the ASTM and the ACCT, but it is the only state that we operate in that lists ACCT as the, um, as one of the standards that we have to comply with.

M: So, um, just in terms of [intentionally left blank], then, how do they, um, is it that they've taken a little bit from ACCT and a little bit from ASTM or is it a case of if you follow either or?

B: Um, that is a good question.

[Laughter]

B: Um, that I'm not... technically they list both in the state's statutes, so we try to comply with both standards.

M: OK. OK. OK. So, um, overall, then, in your organisation, or with the aerial adventure parks, um, what, um, what role or impact, would you say, that risk management has on the overall strategy?

B: Mm. Um, I would say, um, for us, um, risk management is our number one priority for all of the activities. Um, we're a self-insured company. So, um, any, any accident or incident does affect our bottom line as a company. Um, while that's not the driving cause, we, we strive to have, um, a great safety record just both for, um, our slogan is, you know, for our company is [intentionally left blank] and it's kind of hard to give somebody an experience of a lifetime if you're hurting them.

M: Sure.

B: So, we really [inaudible] to, um, give our guests the best experience possible. Um, we're trying to really make sure that, um, as we, as we provide those experiences that safety is, kind of, the first base level of any adventure program. If you can't provide a safe experience, then, and manage the risks that are inherent with the activity, then you probably shouldn't be providing those services.

M: Yeah. Of course, yeah. Um, so, um...

B: So, maybe to answer: we spend a lot of money and time on risk management.

[Laughter]

M: No, yeah. That will suffice, yeah. Um, would you say that it's a... how, how would you say that it relates to the overall culture within the organisation, as well? I'm thinking in relation to the lower-level staff and so on.

B: Yeah, I think, um, what we, we try to do is we've tried to create a culture of safety within our staff. Um, culture of doing, we call it, 'doing right', um, and 'safety first'. Those are our

two slogans that we typically say is that we want safety first and do right. So, um, and, um, I would say that, um, our corporate culture is very strong, um, all the way down to our front-line staff members and then we truly try to, um, let them, um, have the authority to, um, to say if something is not safe and to stop operations at any point, at any given time. That that's, and, that that's a critical function of our risk management that that front-line staff has to be able to blow a whistle, a theoretical whistle, that says, "Hey, something's wrong. It needs to stop and we need to address it, change it or close down for the day", whatever it might be. So, um, we definitely put safety before profit.

M: OK. OK. Um, so, in terms of the lines of communication between your front-line staff and management, um, yeah what lines of communication exists between management and front-line staff?

B: Yeah, so, um, I would say we're, um, we're tiered like any organisation would be. So, um, I mean, you have your front-line staff and then we would have, kind of, our typical, um, work chart would be, you would have, um, your front-line staff member who is an attraction attendant, so they would be the aerial adventure park attendant. Um, they might be harnessing guests or taking them through the orientation, or, um, hooking them into the course or observing safety on the course or whatever. Um, and then we would have, the next tier up would be the, um, who is also doing some of those functions, but is called a, um, a team lead. And so, they're responsible, since we have multiple activities at site, they'd be responsible for one aerial adventure group team. Um, and then from, so, like at our, um, at our [intentionally left blank] resort, we actually have three aerial adventure parks all at that one resort, so, um, we would have, you know, maybe 20 staff, or, let's say, on, on, on [inaudible] you might have 10 staff at each, at each, um, aerial adventure park, so 30 staff on. We would then have, um, 3 team leads on for the day. And then we would have, um, um, from team lead we would go, um, or actually, we have a lead and then a team lead. Lead covers if the team lead is not there. So, we have two layers there. Um, we have a lead and then a team lead. And then the team lead reports up to... maybe the three, those three team lead report up to a manager, um, at the site and at the site the manager would then report up to a senior manager at the site. So, there would be, typically at a site like [intentionally left blank] we'd have three managers and then a senior manager, one senior manager and then that single senior manager at the site reports up to me at corporate.

M: OK. OK. And, um, do you have regular team meetings and so on?

B: Correct. So, um, we actually setup, um, well, we have, from a corporate level we have bi-weekly, um, bi-weekly, um, best practice meetings. Um, and so, there, and then within that best practice, that's just overall operation with that best practice group, we then break it up by specialisation, so we have, um, what we call sub-groups best practice meetings. So, aerial adventure courses will all talk together about best practices and harmonisation of standards and then we have, um, the canopy tours having meetings, talking about canopy tours, talking about ziplines, you know, the mountain coasters talking about mountain coaster issues. Um, specifically that's what we call those sub-groups and those meetings typically, um, take place properly quarterly, those best practices on activities, unless there's an incident and if there's an incident then we trigger a meeting to discuss the incident. Um, and that's at the corporate level. On the front-line level, well also at the corporate level we have weekly safety messaging that goes out, um, throughout the season. Um, everything from, "put your sunscreen on" to, um, "watch out for repetitive motion issues" to, um, um, you know, heat strokes and, and guests or whatever it might be. So, we do have a variety of safety messaging on a weekly basis. And then at, on, at the resort level, um, they do, um, they do morning team meetings, um, communication, they do weekly management meetings, um, and then they also will have, um, the ability to do a couple of special meetings, um, one is the time out and the other one that they do is a special meeting is that they do what we call a "roundtable". So, a roundtable would be, we might say "today is going to be a slow, slower day, so we're going to pull some of the staff over to do a roundtable rescue scenario". So, then we might say, "This is the scenario" and they roundtable how they would handle the situation.

M: Oh, wow, that's fantastic. That's brilliant. Wow.

B: And then, they do also have, um, requirement for weekly rescue training.

M: That's brilliant. I love the idea of the roundtable. Um, that's um, yeah because that's, um, yeah that's a brilliant idea. So, um, and you said yourself earlier, [intentionally left blank], that everything really starts with the front-line staff. Um, so how important do you consider, um, the, this information or knowledge that they, um, that they have, how important do you consider that?

B: That's, to be honest, that's the most important. I mean, if we don't do a good job of training the front-line staff to do their day-to-day jobs and tasks as well as, you know, give them the skills, um, to be able to make, um, good judgement calls in a situation. Um, so that's really, I think, what the roundtable helps us provide, um, chances to develop good

judgment in our staff, um, by presenting some complex or difficult scenarios to work through what would be the right answer. Um, that's one of the aspects for that, I think. Um, we also, um, invest in those front-line staff, beside the basic, um, activity training that we do, um, the company as a whole has a leadership development program and, um, anyone can participate in. Um, and so, there's, like, 14 workshops for leadership development that we provide to the, the employees. We also, um, last year, um, we rolled out a, um, a train-the-trainer program that we did to help engage the staff that are responsible for training at the resorts and strengthen their training skills and this year we're going to be rolling out a program, um, for that team lead and lead, um, position on, um, a leadership specific track, specifically for them, that helps them be better at leading their teams.

M: Wow, OK. OK. [Intentionally left blank], it's so, I'm just, um, my thoughts are that it's so different, because, you, you're so, obviously, larger than, um, you're not a mom and pop store, like most operators.

B: Yeah and, and, I mean, when you, when you become an [...] I think we're right now, [inaudible], I think we're 49,000 employees, is the last I heard, somewhere around there. So, um, that large you have to have a lot of infrastructure in place. Now, granted we have all these programs, but every single employee takes advantage of them. Um, we try to, we, we definitely, that's part of that culture that we try to develop is, you know, getting the individual to engage in that. When, when employees are struggling or not performing well, you know, having those resources to get them on track and, and doing well.

M: Well, it's brilliant to hear that, given your size that you are so focussed on the, um, on the little guy, if you like, on the front-line staff, because you often hear about big organisations that have, kind of, forgotten about that. Um, what, how, what role do you think, then, that leadership plays in effective risk management?

B: So, I think it's, um, I think the front-line staff is your first line of defence. Um, I think your leadership is critical for developing that culture, right? You're, you're, it's those, um... I would say it's us managers and the senior managers on site that really create that culture, um, that helps the front-line staff feel empowered to make the right decision and to make the right decision. And, really, that's their primary job in risk management, is making it safe for those staff to come forward and, and say that they have concerns.

M: Um, OK. OK. Um, and in terms of, um, this is, kind of, leading back, heading back to what we talked about earlier, because you have to consider the federal laws as well as the state laws. So, how does, um, yeah I guess, how does the state and the federal government and, um, but also insurance, how does that influence your risk management procedures? Because, did you say you're self-insured?

B: We're self-insured, so that one's out the door, but we... but I would say actually it does, um, I would say the self-insurance actually, probably, I've been, I've been at university doing this, I've been at, um, smaller camps, I've been at private vendors, you know private companies, um, I've been a manufacturer, you know, been working for a manufacturer, so I've, kind of, done a little bit of everything in the field, in the industry, um, and I would say that being self-insured, actually, um, it, it's really strange, but it really actually brings, um, I would say heightened awareness of the, the consequences of even small risks and it really heightens our desire to provide the safest program, you know. Even something as small as, um, stitches, you know, is, we're paying for, right? So, it's not something that you just have this insurance policy that magically pays it out. Um, you know, we, we, kind of....

M: You've got to cover it all.

B: [...] you know, if we had a major incident you could wipe out the profits of the whole organisation, right? Um, and any revenue that we generated. So, on the insurance side, being self-insured definitely makes us very diligent about it. I think, um, I am actually, um, the more I've been a part of regulations and, and doing, um, working with state and the federal, um, the more, um, I can get behind them and support them. I think that, um, the state regulations, for the most part, that I've worked with have only increased public safety, um, only asked pretty reasonable requests of the organisation and so, um, we tend to see our partnerships, or our working relationships as partnerships for public safety and so we typically enjoy that, um, communication and, um, that candid feedback if we're not doing something that we're supposed to. Um, and I feel that, as we look at, at that role of, um, I think it's, that's the level and that federal level, um, are just one more layer in that risk management plan.

M: And, um, obviously, you're operating in different states, do you then find that, um, are they, do they, are they good at listening to the industry or is it more a case of them coming in saying, "this is how you're going to do it"?

B: I would say it depends on the state.

[Laughter]

M: OK.

B: So... yeah. Um, so, I would say we've got states where they work very closely with the industry and listen and we have states that say, "That's the law and you just have to do it". Um, I would say that it's, um, what I've learned, though, is that all of them, regardless of their attitude, all of them have the best intent at heart, which is, if, if everyone can remember that everyone is trying to do the same thing, which is provide safety to the general public, if you can keep that in your mind-set it makes it a lot easier to work together.

M: OK. I see. Um, I guess, bearing that in mind, how do you think that an incident at one park would affect the rest of the industry?

B: Um, I think we're seeing that it does. I think, um, unfortunately that, um, right now, um, the activity, especially the ziplining in particular, tend to be, um, um, very sensational in the news in North America, um, and so I think we're seeing a lot of reactionary, um, um, steps taken based on, based on... on incidents. So, I think that, you know, it's not that uncommon that incidents happen and then that starts state legislation around that incident, because of the heightened awareness of the activity. Um, and so, I think, um, I think we're also... you know, it doesn't affect us, but we have seen increase in insurance rates across the board, um, for these types of activities and a smaller insurance pool option in the industry, so I think that's going to be a challenge that the industry, as a whole, has to do and face, because it's going to, um, because it's just going to, um, possibly make it...

M: Unaffordable to operate, maybe?

B: Yeah, very much so, especially for the smaller operators.

M: Yeah. OK. Yeah, I mean, that's what I'm seeing as well, that, you know, insurance rates are going up. Obviously, you don't have that burden, um, but yeah for the smaller operator.

B: The, the other thing I do see with regulation, um, is that as regulation gets more strict, um, it would be interesting to see how the industry responds. So, since we are being held to the amusement standard, typically at most states, um, the level of compliance has been slowly creeping up on what it means to be truly compliant with the, um, um, with the standard and so, what that means is that the design and engineering costs are going up and

so we are seeing an increased costs, um, for the design and building of the amusement attraction.

M: Oh, OK. Yeah.

B: Um, because, the costs go up as you, as the states require more, um, requirements to be met. Um, so one of the things I think is a threat to the industry as a whole is that, um, typically for aerial adventure parks and, um, um, ziplines and the zip tours, um, the throughput is actually quite low, um, compared to what a traditional amusement attraction would do.

M: In what sense, sorry?

B: So, um, on an aerial adventure park you might get 600-1000 people through a day. Right?

M: Yeah.

B: That'd be a good throughput. Um, on a rollercoaster you might do 150-200 an hour, right?!

[Laughter]

M: Yeah!

B: So, and \$5million on a rollercoaster that pumps 100 people an hour through, um, makes financial sense. Um, to spend \$5million on an aerial adventure park that pumps, you know, maybe 25 people through an hour, or 40 people, you know what I mean?

M: Yeah, yeah, for sure, yeah.

B: Like, all of a sudden you're, um... and actually, typically, most rollercoasters do about 1000 people an hour, right? So, where, you know... and for us that's becoming an issue, because we're trying to be, um, large enough, large enough numbers of consumers that, um, we need more throughput than we're, than the current aerial adventure courses can provide.

M: So, so how would you go about that?

B: Um, not sure.

[Laughter].

B: I don't have the answer yet, but I do think it's [inaudible], that we're going to see a break, break-point where the regulation required or the technology that's required to operate the activity might exceed the return on investment for the investor, um, with the throughput.

M: Yeah.

B: Or we'll definitely see a slowing of it, right? So, um...

M: So, I mean, obviously, um, there's a lot of innovation going on in the industry as well, um, from what I can gather. Um, I guess, operators, um... I guess this leads back to what you were on here as well, that, you know, you're looking for, um, to get more and more people through, but at the same time, you've got to hit the balance of not making it unsafe, if you like.

B: Correct. And, I think a perfect example of this is even with how popular ziplines have become, there's yet to be a major amusement park to install a zipline. So...

M: Yeah. It's funny you say this, because I was thinking the other day, "I wonder why there isn't one at Disney", right? Because they have the acreage and everything.

B: And, and so that's a perfect reason Disney will never, because, you know, like, we have a forest, um, 4 parallel ziplines and, you know, we're lucky to get 400 people through in a day. They, they have 50,000 people in the park in a day. That's too small of a percentage to make it worth investing money.

M: Yeah. No, that's a good point. Yeah. So, that's, that's a big consideration for you over the next few years, then, huh? Um, what, what direction you're going to head in.

B: Well, and I think that for us it's, it's, um, I think for the industry, for us, we've got our aerial adventures built, you know, we'll continue to expand, but, um, as we look at designs and how we invest money in that aerial adventure park industry, um, throughput innovation will have to happen at some point in order for it to continue to be a viable business model for, at least, a lot of sites as it moves forward.

M: OK. Now, in terms of, um, um, industry collaboration, [intentionally left blank], do you, um, I guess you, personally and you, at the aerial adventure park, um, do you collaborate with other organisations within the industry?

B: Yeah, we definitely do and we, um, donate a lot of our time on, as an organisation, um, both to the Association of Challenge Course Technology and, um, the ASTM standards development for amusement park, is it?

M: Yeah.

B: Um, we also, um, spend a number of, um... we also tend to be an advocate, um, for the ski area, um, Knowledge of Summer Aerial Adventure, so we're pretty active in a program called Through the Ski Area Management Magazine. Um, they do a number of workshop series and one of them is called, um, Summer Operations Camp, um, and we, um, typically have been very active in either hosting at our sites, um, or being, um, asked to be presenters on a variety of topics, um, as well as other things. So, we're pretty open on sharing our, um, what we learn and best practices. Um, I think that comes down to the culture of our company. Um, on the ski-side we've constantly been trying to push and, um, change the industry to be safer and better. Um, and example of that, is that the company was the first one to mandate all employees wear helmets while skiing.

M: OK.

B: Now, pretty much, you won't see that not taking place at any ski area. Um, and so, we try to definitely reach out to, um, at the larger organisations, that improve, um, and collaborate with, um, in a variety of areas. But, on the summer site, yes we've been very open and helpful with a lot of, um, different vendors.

M: Right, OK. And so, um, in terms of the industry in general, what are the levels of collaboration that you are seeing?

B: Um, so we've done everything from, um, um... manager swaps...

M: Oh, wow!

B: ...um, where sites trade staff for a few days, um, both externally and internally. Um, we've been, um, again, presenting at conferences, um, going to conferences, collaborating that way. Um, and I would say we've also been pretty active, um, in a variety of other, um, I would say, one-offs, where, um, for instance, we'll partner with a variety of different, um... vendors that have the same activities that we do. So, whether that be coasters, collaborating with other, other coaster owners on things that we're, problems that we're having, um, to, um, you know, I went out to, um, [intentionally left blank] to collaborate with the, um, zipline there in [intentionally left blank], because we own three of the same

ziplines. Um, they own one and we own three. And, they have one of the largest, um, throughputs for ziplines anywhere. So, we worked with them to talk about what parts are breaking and why and how we can better maintain them and provide better guest-flow and throughput. You know, all sorts of best practices that we shared back and forth.

M: Right, OK. So, um, where are the benefits, do you see, in collaboration?

B: Oh, well, I think, for us, it makes us better, I'll be honest, right? Like, it helps us, um, for us, we're trying to reduce costs and improve throughput, improve, um, staff, staffing model, create a better guest experience, um, reduce accidents. Um, all of that would be realistically the benefits, right? So, um, we joke that we always seem to find a way to break things and that, um, you know, we try to work closely with manufacturers as well as we're breaking things to share with them what we've learned and I would say that a huge number of technical innovations have come out from, um, our collaborations with, with vendors. Um, a lot of, um, safety bulletins and other things have been written, um, based on the things that we've learned, um, for the manufacturers, because they can't be out in the field as much as we are.

M: For sure. Um, so, from your perspective, it's, it's really with other operators, um, with the manufacturers and, and with the state government itself as well, or the federal government as well.

B: Very much so. I mean, um, typically, um, we have, um... typically we'll try to invite the states up, you know, on the state level, just to come audit us, even if we're not scheduled for an audit, um, on a regular basis, to have them out and, um, we, typically, have an open door policy with them.

M: Wow, OK. At the same time, do you see any drawbacks to collaboration?

B: Um, sure. You lose your, you can lose your... sometimes you can lose your competitive advantage, right?

M: Right.

B: So, you know, if you've got something that's really, really allows you to have a competitive advantage, you have to be careful on that. How... how... is it really a competitive advantage or is it a safety issue. Um, or is it a great thing? And, I think, um, typically, as long as you have a free-flowing collaboration between both parties, um, the blow-back is minimal, because you're both getting better, um, if both parties are sharing

and both parties are working, um, in the same direction. I think, um, with the state it can cause headaches to be, um, more honest and open, um, right?

M: OK?

B: Because you can be challenged to fix problems that maybe they would've not found, right? So, um, but I think that goes to the risk management side, that I'd rather be open and honest and find those problems and address them, than trying to cover them up and hide them and not collaborate with the regulator, um, because at some point in time it's probably going to, um, come back to...

M: To haunt you.

B: Yeah.

M: Yeah. For sure. So, um, what, what do you believe then is required for collaboration to work, um, I guess, in terms of trust and individual skills and so on.

B: Yeah, I think, um, I think for collaboration to work, both parties have to, um, both parties have to trust each other. I think, um, I think both parties have to have, um, true, um, intent, um, true intent to be willing to share, um, and be open, and I think the last one is, I think both parties, and this may be the harder one sometimes, both parties have to have something to give.

M: Right, OK.

B: Right? Because, it's, it's, it's not collaboration if it's mentorship.

[Laughter]

M: Right.

B: Right? So, and now, I also believe that everyone has something to share and it might be hard to dig and find it, but, um, we do sometimes fully, um, being the size of our organisation, sometimes we are little bit more maybe on the mentorship side, but then, um, vice versa, we look to even bigger entities to help mentor us as we move forward through the process, um, such as Disney and Universal.

M: Yeah. Um, yeah, because they, um, in the theme park industry, they collaborate on a lot of things when it comes to safety. I mean, I was at a conference in Orlando in November and I was told that they all put metal detectors out, for example, on the same day, at the same time...

B: Yeah.

M: [...] um, all done together, yeah, um, which would be lovely to have in the aerial adventure industry, right?

[Laughter]

B: Yeah. It would be wild. So, did you go to IAAPA or did you go to...

M: Yes, yeah, IAAPA, yeah.

B: Yeah. So, yeah, so, that's a perfect example. Like, we would attend IAAPA as well and we would also attend the ASTM meetings, which is where the standards for the IAAPA are and, you know, we sit, I think, currently, I am the secretary on two committees and, um, we, we participate pretty heavily there.

M: Oh, wow. Yeah, I was hoping to, um, go to the ASTM conference this year actually, but just with everything being jam-packed at the moment, it's, um, my supervisors basically told me not to go to any conferences after Christmas, so it's, um...

[Laughter]

B: Yeah! Probably good advice.

M: Yeah, right? But, it's like everything seems to come straight after Christmas, because there was one in January and then there's the ACCT in February and the ASTM in February.

B: Yeah, the ASTM is literally the same days as the ACCT.

M: Yes, yeah. Very true, yeah. Yeah. Um, but anyway.

B: I'll try to get to at least one.

M: Yeah, maybe next year. Um, but so, um, do you think that these, the requirements for collaboration that we've just talked about, do they exist in the industry widely or...?

B: I, I think, um, in the old days of the aerial adventure it, it was, um... I think it's diminished some with the advent of the commercial operator. I think there are... I don't think it's gone, I think there are quite a few commercial operators still interested in collaboration. I think, um, I think some of them are, um... I think it's 50/50 on the commercial operators on how well they're... how well they're doing at becoming that collaboration network, um, compared to, um, the old educational institution. Um, and I think, um... and I think, though, that it's, um, it's becoming more and more common.

M: OK.

B: I think they're, they're growing into the culture of it, through ACCT and other organisations trying to push individuals to be more collaborative.

M: But, so, um, this, this is probably, um, given the majority of the industry is small-to-medium enterprises, um, I know you guys are not, but, um, how, how do you think that might impact collaboration within the industry?

B: Um, good question. Um... I, I think that, um... I think that it's... I think that organisations are the key in impacting collaboration. I think that providing opportunities for connection, providing opportunities for a safe environment for collaboration and developing that culture of collaboration. Um, so I think that that's where, um, I think that's, I think developing collaboration relies heavily, not only on the individual organisation, but I think, um, that should be the primary focus of, um, different associations. Like, um, as you, as you went to IAAPA, um, you saw that organisation's effort at developing collaboration, um, and I think if you've been to ACCT you've seen that as well.

M: Right. For sure.

B: But, um, that is, that is a means, is a great means to develop that.

M: So, um, do you think that there are, because, obviously, the ACCT conference, um, there's only of them per year, so, do you think there are enough opportunities to, to provide this, um, foundation for collaboration, essentially, for the industry?

B: I think, probably, for a larger organisation, yes, one meeting a year is, is sufficient. I think the downside is for the smaller organisations. I think, if you look at the attendance to those meetings as the ACCT moves around, they're very, for the smaller organisations, they tend to attend based on their geographical location and [inaudible]. So, I think, probably, on the smaller organisational side, probably more local and regional collaboration would benefit the smaller organisation, um, but I think that that's a difficult to task at hand to, um, manage and organise. Um, I do know that on the educational side AEE, um, kind of, runs with that model.

M: AEE?

B: Um, Association for Experiential Education.

M: Oh, OK. Yeah.

B: Um, they have a national conference and then they have regional conferences throughout the country. Um, but I believe that they find that the regional... that often times, um, one, one can hurt the other from, from feasibility, because if you have too many regional conferences, then the attendance on the national conference goes down and, or, vice versa.

M: Yeah, because that's, um, that's the problem isn't it? Because, I mean, one of the things, as I'm doing the data gathering, one of the things that I've heard is that, um, you know, there's the, especially for the, you know, smaller operations, there's the time and the finance issues of collaborating, um, especially at these conferences where they might not be able to send the whole team, as such, you know, the senior management team or whatever, it's generally just the owner that goes and then how much does that owner actually benefit from the conference as compared to two or three from the, an organisation going. Um...

B: And, and I would agree. And I think, you know, as you make more and more opportunities it does not necessarily equate to more people attending, um, because people have to pick and choose how they spend their time and money.

M: Yeah, exactly. I mean, do you think something like a virtual conference would benefit?

B: Um, I think virtual learning, yeah, is, is an opportunity and one those associations could, could look to gain at. Um, I think virtual training has picked up in, in terms of acceptability, um, and I think it's something that would benefit this industry, probably, better.

M: OK. OK. Um...

B: It would allow probably more front-line staff, right? So, I think that's, that's one of the challenges. How do you get your front-line staff attending these workshops and conferences, because they're typically not the ones attending them?

M: Yeah, and unless it's right on your doorstep they won't be able to attend. Um, so how do you believe that other stakeholders can be motivated to, um, participate, um, to collaborate, um, more, I guess, um, in the industry?

B: I think it's a valued proposition, as anything is. I think the, um, in order to get people bought into collaborating they need to understand, um, the benefits of collaborating and, um, I think that, um, that really only comes from one of two ways, which is personal experience from that individual that made such a decision to collaborate or testimonial.

Um, I think it's, it's something that has to be learned, um, as a valuable skill set. It can't just be something that's mandated, of course.

M: OK. Right. So, um, kind of, from people's own intuition or, um, mind-set, if you like?

B: Yeah, it's got to be their own, um, it's to be their own belief and value-system. And I think that can be encouraged, right? Through personal experience, through the, those conferences and attending those things can develop that as they see the benefit to them, but I think there has to be a benefit to the individual for the collaboration.

M: And so...

B: I think the other intrinsic reward that you might be able to leverage is, um, um, [inaudible] personal, um... maybe on the ego side you could go with the, um, that they have something to give and the value that they bring and the, um, the, what, what that, by having them give, how that increases their stature.

M: Yeah, kind of explain to them that their input is very valued to the rest of the industry and so. You know, what they can add to it. Yeah, that's a good point actually. Now, in terms of collaborating on risk management, do you think it would be beneficial to create something like, um, and it could be done by the ACCT, but something like, um, an industry-body that just focusses purely on just, um, risk management procedures within the industry?

B: Um... I think, um, I think, um, probably the most valuable thing that, um, um, this industry could use at this time, um, in regards to that kind of safety information, would be true statistical data. Um, I think, right now the industry is functioning in a bubble of not knowing and not being able to defend itself. So, because there is no, no statistical information about how safe these activities really are, or are not, um, the number of incidences that occur per use hour is not clearly defined, um, and any research on that is pretty suspect at best. Um, I think that that greatly hurts the industry and its ability to, um, know how to improve safety and/or know how to, um, respond to government regulators or other pressures about the industry in regards to safety.

M: Yeah. Um, so, how would you go about, I mean I know the obvious answer is that you need to conduct the research, or whatever, but how would you go about making sure that operators are willing to share that with, because that's obviously sensitive information in the sense that, you know, "we don't want to look bad in front of the rest of the industry or the public".

B: Yeah, I think... I don't know if there will ever be a way.

M: Right, because they do it in the amusement rides, right?

B: Yeah. I think it would have to go through... it would have to go either through a... I think I would look at other industries. Um, you know, the two ways to typically do it: the trade organisation that either conducts it and shows some benefit and value of it so people participate in it, um, or it's mandated by federal authority, um, such as FAA and other things, right? So, um, I think it's going to be one of those two ways. Either the association has to step up and say, "This is needed for X-Y-Z reason" and it has to be a really compelling reason, um, or it needs to, um, or it will be mandated down eventually at some point in time from a federal stamp, like OSHA.

M: OK. OK. Yeah, because, I mean, you're absolutely right that the industry needs to know that information and there has been, um, there was a publication a couple of years ago now, um, I don't know if you saw it, um, done by some professors, I think, at Ohio or something like that and they did some research on ziplines, but the problem was, um, in my view anyway, that, you know, it wasn't detailed enough, because even they couldn't get detailed enough information on incidents and so on.

B: Correct. And, and, you know, one of the more touch-run ones was the centre, um, the CDC did one through a hospital, through emergency care thing, but unfortunately it had complied commercial ziplines, playground ziplines, like the one, like the trolley one at the playground and also backyard, homemade ziplines. So, it was all gathered and it was still contingent on whether the doctor input the information right or didn't input the information right and based on their assessment whether this was a zipline accident or not. So, you know, I think that, exactly, is that it's a pretty... until the operators, themselves, start self-reporting, um, through some form or fashion, um, I think there will always be suspect information.

M: And so, what do you, um, what role do you think, then, again going back to leadership, what does that play in ensuring that collaboration, for the entire industry, I guess, can become a success?

B: Yeah, I think, um, um, I think that it's really going to rely on, um... I think one of two things will either be a factor. If the insurance company could either provide us with, um, some kind of guidance that if we can improve our safety record and our stats better that they can do better with our, our...

M: Rates.

B: [...] our rates, um, I think that would be a big factor. Um, often times it is insurance companies that hold that data so they can do a better assessment of, of rates. Um, so, I think that that... I think there's got to be some sort of monetary driver behind the leadership, whether that be through insurance or through the ACCT or through the knowledge that we need that information to help [inaudible] for appropriate regulation and, unfortunately, I think, um, our industry is too fragmented and too diverse. Um, everything from a company like ours to the mom and pop that I think it would be hard to rally that, that kind of mind-set.

M: Um, so you would like to see more collaboration between industry and public agency as well?

B: Yeah, I think, well, I think that, um, well, in order to get movement and leadership in that direction to solve the problem, I think there has to be a pressing need or people won't do it.

M: OK. No. No. I mean, it's like what we see with the states, right? Unless, there's been an incident they tend not to look at regulating the industry, right?

B: Correct.

M: Yeah, unfortunately. Um, just going back to what you were saying about the insurance companies, um, you know, a lot of the time, um, I think you were just saying this, that you know, they hold some data at least on incidents and so on, because in a lot of cases they'll require operators to, you know, give them a call if there's been an incident, um, so is it not possible that they could somehow, um, you know, let ACCT know whatever their stats, because then that would be more anonymous as well, um, for the individual operator.

B: Correct and so that's what I would say it would have to be some sort of partnership with, with either with, you know, insurance, insurance carriers or, you know, there's different ways to do it. Unfortunately, that's not going to gather all the data, but it's going to gather quite a bit.

M: Yeah, for sure. OK, yeah. Sorry, I didn't get that point, sorry, [intentionally left blank]. Um, OK. So, um, do you think there's an issue of, um, or would it be an issue that there might be a, sort of, industry experience from the, um, public agency side?

B: Um, I think so, but I think, um, yes and no. Um, I think they have a hard time deciding what we are, um, because I think, you know, I, I think on side there's a group that wants us to be seen as a rock climbing guides and river rafting and similar to those activities. Then there's the other side that wants to see us as, um, more in line with the amusement parks and so, that causes conflict and that causes the debate that usually struggles. On the amusement park side, the states are pretty, the states that do regulate ziplines, um, tend to [inaudible] more toward the amusement park side and I think there is, um, I think that, um, there is good understanding there as long as the ride is designed more as an amusement ride and not as an educational, experiential tool. Um, so I think that's where, um, the diversity of what you would call a challenge course or aerial adventure park is so diverse that it makes it complex for the regulators... because there's a big difference between a commercial operation, like ours, and the ones put in place where it's a confidence, team building exercise at a university.

M: So, have you, have you found then that you have to, I guess, to a certain extent educate public agents?

B: I think, yeah, I think, I think so and I think, um, the goal would be and one thing that we've tried to, kind of, clearly do with, um, the ACCT regulation is trying to, um, encourage them to separate the difference between the commercial operation and educational operation, um, because, I think the structure of the [inaudible] are so vastly different that it's critical that they stay different.

M: Yeah, I mean, that's, that's what I'm hearing as well, um, you know, from my research, you know, the issue of, um, like you're saying, a lot of the states looking at these parks like they're an amusement ride, which, um, you know, in many cases, like you said previously, that this is much more for personal experience than what you'll ever get at Disney or whatever. Um, so, um, on what level, because you deal with both federal and state governments, um, is there a, almost, is there a preference? Do you think it's better at a local level or... or do you prefer federal?

B: Um, I think currently there's, there's... well the federal level for us is just the US Forest Services and, um, so I think I don't think see a difference, to be honest, between the two, like from a favourability standpoint.

M: Right, OK. Well, [intentionally left blank], um, that's, that's really all I have. Um, in terms of going forward, um, what do you think the future looks like, um, for the industry? I know you touched on it earlier.

B: Yeah, so I think the, um, I think the future is just that... we have to make them safer and more, for the commercial industry, they have to... I'm just going to go back to my last statement: I think that the future is we need more clearly define the difference between commercial and educational programming and treat them as two totally separate entities, because I believe they should be treated as different entities. So, a facility like mine versus a facility at a university should not be held to the same, um...

M: Um, for sure, yeah, because they're so vastly different.

B: Yeah, so I think that that's the key. I apologise, if there's a few more questions, I'm going to have to hop off and we can continue tomorrow.

M: Yeah, well, [intentionally left blank], that's, it's all I have actually, so...

[Laughter]

B: Well, perfect.

M: I was just about to say, "well, thank you very much, [intentionally left blank]". So...

B: No problem. I just apologise. I do got to run real quick. Um, but if you want to, if you need any follow-up questions, don't hesitate to drop me an email and we can do this again.

M: [intentionally left blank], it's been brilliant. Thank you very much for, um, and I'm so sorry we over ran a little bit, I told you it was only going to be an hour.

B: That's OK. I can be a little long-winded.

M: That's alright. No, that's alright. Thank you very much, [intentionally left blank], and have a good day.

B: Thanks. You too. Bye.

M: Bye, bye.

Call ended.

Participant 10 Interview

B: Participant M: Me

*Recording started after call started, due to issue with recording app.

M: Um, a couple of checks, basically. Um, I just wanted you to know that, obviously, I am recording the call, um, and, basically, after we've spoken I'll send a copy of the conversation, um, of the recording to you, um, and once I've transcribed, um, the call, I will send a copy of that to you as well. Now, obviously, your identity, it is all confidential, so any potential identifiers, as well as the obvious ones will, um, will be left out of the transcript. Only you and I will know that you've taken part in this. Does that sound alright?

B: Yeah, that, that's fine.

M: OK. Fantastic. So, um, do you have any questions at all before we start?

B: Um, not, not to me. I would love, um, being that we're in the business of regulating amusement rides and devices, um, I'd love to actually, um, have access to the, the end product, your, your final paper. Yeah, because I think it could be very helpful to see how, yeah what we can learn from it too.

M: Oh. Yes. Oh, fantastic. Um, that's exactly what I'm hoping for really with this, um, research. Um, I'm hoping to get some publications out of it, um, which would be widely available, but I am obviously, um... I have a background in the industry, myself, in the US, um, I used to have three parks in New Hampshire and Maine, so, um, I, I do hope that this will, at least, help the conversation on collaboration in the industry. Um, it would be even better if it improved it, right?

B: Sure.

M: So, yeah. Very much so. Once I've finished this study and, um, once I'm looking at publications and so, I shall certainly be in touch with you, um, [intentionally left blank].

B: Sure. Sounds good.

M: OK. So, um, please tell me about your role at the state.

B: Sure. So, I serve as the, um, director for the Division of Oil and Public Safety at, um, [intentionally left blank].

M: OK. Um, and so, um, in terms of the aerial adventure industry, um, do you currently regulate that?

B: Yes. So, we, um, within our division, we're pretty, we regulate a variety of different things from petroleum products to boilers and pressure washers and elevators and escalators, but of the items we do regulate are amusement rides and devices and, um, so that includes, um, you know, aerial adventure, um, courses and ziplines and, um, other traditional amusement rides and carnivals.

M: OK. OK. And, um, how long has the, um, I guess, how long has the state been involved with that and how long have you, um, personally, been involved with the regulating or worked with the industry?

B: Yes. So, I've been, um, with our division for 17 years now and, um, we've been regulating amusement rides and devices, um, longer than that. Yeah, so our department has been regulating them for, I believe, for over 25 years.

M: OK. Wow. Now, and on the aerial adventure parks, do you oversee commercial, educational, the whole lot or, um, or do you focus...

B: So, let me clarify one thing. So, we've been, we've been regulating amusement rides and devices for 20 plus years. Um, as new equipment and devices come on the market place, um, as is common in the amusement ride industry, we amended our regulations to address new devices. So, um, aerial adventures and ziplines have been in our regulations for less than 5 years.

M: Right. OK. And, um, what do you believe is the key attraction to these, um, adventure parks?

B: Um, yeah, I would say, um, amusement and thrill. Um, I think, um, the thrill more than, than anything. Um, and maybe just to answer your other question that you had, before that, is, um, our focus with our regulation is, um, the, the rides and devices that are open to the public. So, you have... if it's something that's, kind of, a private, um, amusement ride, um, you know, that's, that's let's say, in a fitness centre, or, or kind of, if it's not open to the public, then we wouldn't, our regulations don't cover those, we don't have that jurisdiction. So, ours are only for amusement rides and devices that are completely open to the public.

M: OK. So, if, um, just for my own curiosity, if, like, a hotel resort or something like that, had it on their property, would it be included then, or?

B: Yeah, so if, um, if, um, a hotel or a resort had that and it was, um, like if there was no, um, you had to be member of the resort to participate, um, and yeah, you are, as a general public, could walk in and say, 'hey, I'm going to stay here for the night', um, then we would regulate that, if there was no restriction on who can participate.

M: OK. Yeah. OK. That makes sense then. Um, OK. So, um, obviously in the aerial adventure industry, I realise that it's relatively recent that, um, you've started working with it, but, um, how important do you think that this thrill element, or this illusion of risk, is to the overall attraction of these parks?

B: Yeah, I, I, yeah, I would think it's, um, it's an important consideration that drives people to these parks. It's just like you said, the thrill or the element of risk, um, that goes a little, that kind of pushes the limit on the traditional, if you can call it that, rides.

M: Yeah. For sure. OK. Yep. And, um, in terms of, um, looking at risk, um, on these parks and so on, how would you define, um, risk?

B: Um... so, we look at it from a, insuring that, um, and this is more specifically for, um, ziplines and, and aerial adventure course, um, places is, yeah, with all of these, with any amusement ride or device, that there is an inherent risk, um, you know, for a patron. Um, with these, um, it's higher, especially with some of the challenge courses and all of that. Our authority focusses more on the mechanisms that, um, the patron is dependent on. So, if they're in a harness or they're tethered to something or, you know, on a zipline, or whatever, their, their security is dependent on that mechanism working, that's what we're trying to ensure is safe. There are other inherent things with, like a challenge course, where they may get into, um, you know, being off the tether and then jumping over logs and running through fire, something. Um, that is not a part of the amusement ride per se, um, so there's kind of a fine line that we look at. So, I'd say there is a high risk, um, and hopefully there's a high awareness of that risk, um, you know that the ride operator can communicate to the patrons, um, and, um, but, like, I would say our focus is more on the, I would say, the mechanised device that, um, somebody is relying on, um, yeah, that's usually what we're focussing our regulation on.

M: So, you look primarily on the, the actual structure as such. Um, you don't look so much on the operations side?

B: We do look at both the operations... yeah, the construction, installation and operation, um, but a lot of the focus is, is more on the, like, the safe, the safety of the mechanical devices that, that, um, are restraining or ensuring that the person gets to go through the course or the ride, but that part is, is secure.

M: OK. Right, yeah. And, um, do you, at the state, do you, um, follow specific standards, or?

B: Yes, so we, um, we adopt, um, like national codes and standards. So, we adopt ASTM. Yeah, pretty much, really that whole F-24 section, um, for, um, you know, amusement rides or devices. Um, we've [inaudible] or we adopt by reference, um, the National Fire Protection Association standard, so the NFPA and then, specially related to, like, the aerial devices we, you know, also adopt the Challenge, um, the Association of Challenge Course Technology, ACCT. Um, we incorporate those per reference too. So, those are the primary, um, standards. If you look at our regulations there will be a section that points to all the different standards. Especially for the aerial devices, we point to the ASTM and the ACCT.

M: Oh, wow. So, is it a case of, um, if I'm an operator, is it a case of, do I follow either or is it a bit of a mix on your standards?

B: Yeah, I think, the way we would look at it is, um, realising there are, there are, kind of, variations at how the adventure course is setup and, and all of that, and so, we allow for, for the operators that represents, um...

M: Their operation, yeah...

B: [...] their operation, yeah.

M: Do, do you think it would be beneficial for the industry if there was, um, I guess, just one standard, rather than...

B: Yeah, I think it is always helpful when there's just one. I think, historically, when we, you know, we do a very strong stakeholder engagement process, when we do new regulations and when we were looking at, you know, regulations for some of the challenge courses, um, ASTM was still in the process of updating and revising theirs, um, we felt that... and in fact ANSI, um, they also have a standard out there and, at least, a few years ago, we felt that, um, that the existing ASTM, or where they were looking at changing, and ACCT were the most developed and readily available. Again, some of our thoughts with having [inaudible] and there were, with a new, um, segment of industry that, that we begin regulating, we

want to allow for some choice and then figure out which one, which one is the, like, the primary or referee standard.

M: So, do you, do you think that down the road then you might say, "Well, actually we're just going to stick with one of them now", or?

B: Yeah, I think it might. Yeah, as we gather information and if we see that there's, there's better consistency and, um, yeah it's likely that we might go to one. And, usually, our preference is, you know, the ASTM standards. Those are more international. And, um, who knows, could, like, by reference, pull in the ACCT. I don't know.

M: Well, um, just from my own research, it seems that a lot of the people that are connected to the ACCT are also connected to the ASTM, um, so that could very well happen, maybe, down the road, yeah.

B: Yeah.

M: Um, so what do you think, then, that, um, what does effective risk management look like to you in the aerial adventure industry?

B: Um... yeah, I think really that ensuring that the equipment, first of all, is compliant, um, with a certain standard and, yeah, is constructed with... and making sure that that equipment is installed correctly and in accordance with the manufacturer's requirements, um, um, it's operated in accordance with, like, the operational criteria and limitations and, and, and so the operator is fully is aware of the limitations and where they need to have... making sure the attendants are kind of knowledgeable on that, um, and actually enforce that, yeah, to avoid accidents and injuries. Um, yeah, periodic, um, um, maintenance and inspection, um, well beyond what we require, yeah, like, you know, we require a lot of documentation and stuff, but just, kind of, standard, common sense practices, daily inspections and all that and just being, yeah, not complacent, I guess is one of the things we've learned, is sometimes you get people that have, are very knowledgeable, but become complacent and that's when you have incidents. So, somehow, we are trying to prevent that complacency from setting in. Um, but also just staying on top of maintaining, um, their operations, having them, yeah, by qualified people and, and just, like, accountability everywhere.

M: Yeah. OK. And how do you, um, how do you monitor that these procedures are being followed?

B: Yes. So, yes, so the state's program, so, [intentionally left blank], is set up more as a, to provide oversight. Um, and, and, almost like an audit sort of oversight. So, we have a requirement that anyone who operates a regulated device, um, needs to first have that permitted through our office and so, part of that permit requires them, um, to have that ride inspected by qualified inspector and compliant to agencies like NARSO, you know, for qualified person, it's another body that might qualify people to a certain standard. Um, but we also require the operators to have certain minimum insurance requirements. Um, but essentially the [inaudible] part is really like a notification of what they have and that it's been inspected by some qualified inspector and some basic insurance requirements, but then our regulations require them to, um, yeah, obviously, to have that installed correctly and inspected and all that. Then, um, periodically, operated by, like, qualified persons, attendants and all that who are knowledgeable about the ride, um, having daily, weekly, monthly, sort of, inspection logs, maintaining that on site. Um, and then, we require just one annual third-party inspection. So, yeah, they can do a lot of inspections on their own, um, and we would encourage that, but, but to have a qualified third-party inspector come out, at least, annually to inspect the, the device.

M: And, um, I don't know if you just touched on this, [intentionally left blank], but, um, a qualified third-party inspector would that be some, you know, I guess, a vendor member from the ACCT, or?

B: Yes, so, so right now, um, let's see, I believe the inspector, we define it as a third party qualified by training, such as a level 3 certificate from NARSO, um, um, yeah, or a qualified, yeah we do recognise the, um, ACCT. We also recognise certification from AIMS, Amusement Industry Manufacturing and Suppliers or ACCT for challenge courses. Um, we also look at, like, Pennsylvania's, um, general qualified inspector and, um, if there are other equivalent, yeah, we would consider them on a case-by-case experience. We would also look at, like, a registered professional engineer who has very specific experience in amusement rides. So, not a chemical engineer!

[Laughter]

M: Yeah, obviously, yeah.

B: Yeah, but, yeah, we look, um, for, for certain... definitely we recognise the ACCT

M: OK. And do you, do you, at the state, um, do you come out and inspect the courses yourselves as well, or?

B: Yeah, so we have, um, um, some inspection staff. Like I said earlier, we provide more of an audit oversight, than inspection. So, so, the owners of these rides, um, we have an annual registration requirement, so every year they have to re-register their rides that they intend to continue, part of that is, that they submit their annual inspection, passing inspection on their ride, um, as well as renewing their insurance and stuff. But, our guys will go out and inspect the facility, um, and then, you know, look at are they maintaining, um, their periodic inspections books, so, like, their weekly logs and daily logs, you know, just things like that. Um, they would, kind of, do some walk-through stuff, but, um, we're doing more of an audit inspection, rather than, like, we aren't conducting an inspection that the owner gets to say, "The state inspected it, so it's safe". We, we really are issuing a permit based on the third-party inspection.

M: I see. OK. OK. So, I guess, in terms of, internally, um, at the, um, at your department, then, um, what lines of communication between, um, you the management and your inspectors, um, exists in regards of, in regards to sharing knowledge on risk management between each other.

B: I would say it's pretty open. I mean, they're down the hall from me.

[Laughter]

M: Oh, right. OK. OK. Is it a relatively small department then?

B: Yeah, it is. Yeah, we are about, between the whole department, we are about 80 people in this division, so it's, um, very close knit. It's very open communication, um, between the guy that might go out and do an inspection and, um, yeah, the managers of the program as well as me. So...

M: OK. Wow. OK. Um, and in terms of, um, regulating the industry, from your point of view, how important is leadership in effective risk management?

B: Yeah, I think, I think it's extremely important. Um, you know, we're kind of, um, maybe you might know better, but we think we're somewhat unique in that we are in a department of labour and employment and so, which I think is, in a way, a good thing. So, one of our, um, kind of, values and premises is, you know, we want to make sure that, um, our industry is successful, um, you know, the labour market is successful and is safe and so, we have, I think, in [intentionally left blank], more of a tendency to work in partnership with industry to, to have a safe outcome, um, yeah, and so, we're more engaged with, like, engaged, than more engaged, in education in stakeholder input and all of that in our

regulation and how we implement our program and so our focus is, um, and I know it's a cliché, but we really take that a little, um, more than... and we believe that a healthy industry is a safe industry and it's in the public's interest, and so we tend to be working more closely with... those that we regulate than some states. For instance, the guy that we, a couple of the guys that we have in our inspection [inaudible] have, like, 3 years' experience from, like, Elitch Gardens and some of the majors parks, you know, where they were the, you know, the guys that actually worked the rides and, and what not. So, a wealth of knowledge that we've been fortunate to have to be able to help, um, those that we regulate also.

M: Um, is that, is that the case in the aerial adventure park side as well? Um...

B: Not much on that side, yeah. Because, we have a limited staff, um, and, um, no, but the guys that we have, they clearly have that background.

M: OK. No, no, I mean, the industry is so new and young as well, so it's... yeah.

B: Right.

M: So, um, how do you collaborate with private stakeholders within the aerial adventure industry?

B: Kind of what we do, and that's just again one of the things that we hold in high value, right from me in upper management, is, um, that... you know, the focus of our program is safety and so, unlike other programs, there's no fluff at the end of the day, it's down to keep people safe and so, um, the best, we've found that the best way to ensure safety is to be able to implement stuff that really makes sense and is actually trying to make a difference. Being safe, for us, is not having, um, like stuff, like red-tape, you know, that is meaningless. So, we, whenever we do, um, any changes or proposed changes to our regulations, in fact even before that, it starts with our engaging with stakeholders, um, I mean, stakeholders, you know, the ones that we are regulating. So, we kind of reach out to them and invite them, periodically, to come to our offices. We hold a meeting and, um, yeah, discuss, you know, "hey, what's, what's the market doing? What's on the horizon? What do we need to address?", this and that. And so, they provide us with input, um, so then, then we decide, "OK, should we make a change to our regulation" or whatever, and then we, um, will open our rules and then we invite the general public, but we really focus on those that are in the industry and invite them to, to come to a meeting at our office and we go over, like, with a whole big group, you know, "here's what we're looking at

changing” and why and we’ll have a lot of open discussion and input and debate and what not and then, you know, make changes, um, most of the time based on the input that we’ve received. Obviously, there are some things that we will do that we have to do, um, and, yeah, they may, they may not be, like, complete buy-in, but in the interest of safety, certain things need to be done. But, we, we really engage. So, like, when we opened stuff up for the, um, aerial adventure, I think there’s a company, Bonsai? Yeah, that participated pretty actively with us, um, but then, yeah, others that were part of, like, ACCT members and, yeah, and ASTM people, even had some outside people, but, um, a lot of the ride owner, operators, um, engage on that, so...

M: So, you’ve found there’s actually pretty good participation then on these industry meetings?

B: Yeah, we, we actually try to do a lot of [inaudible] to get, to get them, um, to us and I think what we’ve done over the years is really build, um... more of a trusting relationship where industry is not afraid to come and talk to us, tell us, tell it to us like it is.

M: Oh fantastic. Right. Yeah.

B: And, and we appreciate that, I guess, because we want to have a better program at the end of the day. So, so, it, kind of, works.

M: That’s, that’s, um, that’s very impressive, um, to hear actually, um, because some of the other places that I’ve talked to, that’s not been the case. So, yeah, that’s really good.

B: Yeah. The other thing we also do, is we do, like, um, our office, there’s like newsletter and bulletins, like our amusement ride group, that we send out to all the, like, amusement rides, I don’t know if it’s quarterly or something, an electronic newsletter. And it just talks about, “hey, here’s what’s new in our program”. Or, “here’s an incident that happened at an amusement ride” and not naming names, you know, and here’s so you can just be aware of this situation or if there’s a safety bulletin that comes out we’ll help, kind of, share that information and stuff.

M: Wow. And, and I don’t know if you said, but how often do you have the meetings with your industry stakeholders?

B: So, with, with the stakeholders, um, usually we do that, um, at least once a year, sometimes more periodically if an issue comes up. Um, but usually we don’t change our rules, um, more than once per year. And sometimes, you know, we may have meetings and

not decide not to change anything. Um, um, and then every few years we actually go around the state to different locations and have, kind of, like an open house-type thing where we invite stakeholders and they get one-on-one time with our amusement ride program staff along, you know, we do the same thing with the other groups I talked about earlier, but, um, but there's more, there's more interaction...

M: So, you almost get to know each other, yeah, as well, yeah.

B: Yeah, there's almost like a friendship, really...

M: Yeah. Mm.

B: [...] like a professional friendship with the, with the people really.

M: Yeah, that's fantastic. And do you that, um, because obviously in the industry, um, at the moment there's a lot of innovation going on, do, do you find that you have to often go back to your rules and regulations to, um, keep them up-to-date in that sense, or?

B: Oh, absolutely, yeah. Yeah, and that is a challenge, um, just being able to, um, to make sure that, um, yeah, that we're regulating, um, appropriately regulating the new device as they come on the market. And then, the other challenge is that, um, yeah, there's devices that come on the market for which, um, it's so new that there isn't even a standard.

[Laughter]

M: Right.

B: Yeah? So, that can be challenging too, because it's like, "OK, what do we, what requirements do we hold them to if we decide to regulate them?". So, trampolines were an example, you know, trampolines, and kind of, the aerial adventure too, um, you know, with just getting the standards and the trampoline standards through ASTM. Um, and, um, you know, when, when the ride gets, yeah, advanced in design and all that, quicker than the standard, it's just... it's a catch-22.

[Laughter]

M: Yes. Do you find then, that you have to, um, go back to industry and say, "OK, we've seen this new item that's coming out...", you know, how, do you, do you take advice from the industry, I guess, on "how do we regulate it?" or?

B: Exactly, yeah. That's usually a lot of what the stakeholder meetings are. You know, they might come. Sometimes, you know, it's interesting, because an owner may say, "hey, these people are doing this...", like they're competitors, "...and what do you think about that?".

[Laughter]

B: But, that's why we bring everyone in, so it's [inaudible] and whether it needs regulating and whatever.

M: OK. Wow. Um, now, um, from your perspective, are you seeing any levels of collaboration within the industry as well?

B: I, I think so. I'm not particularly sure, or familiar with, like, on the aerial adventure courses, but I know in some of the other areas of amusement rides, like, with, um, like, with ziplines, even with trampolines parks, which is one of the newer ones for us as well as, um, kind of, with the, um, like certain, um, like the ski industry, [intentionally left blank] is big in the ski industry, you know, there's alpine slides and other types of devices, like ziplines, all sorts of things that they're maintaining on the ski slopes, and so that community, like, for instance, has gotten together and really has put in a lot of thought and effort and, um, you know, consideration of safety and the regulating and been engaged with, like, the ASTM and all that and, um, the right manufacturers.

M: OK. And so, um, I guess, obviously, you're not just working with aerial adventure industry, like you're saying, you know, you've got a whole industry, amusement industry, um, to keep check on as well, but, um, do you, do you attend any conferences on the aerial adventure industry? Like, there's an ACCT conference, for example. So, do you get time to attend those?

B: Yeah, so I personally do not, um, or I have not for a long time, um, but, but, you know, we have a program manager over amusement ride section and, and as well as the inspectors. So, those guys will go, like our inspectors are NARSO, um, certified, yeah, they're level 3, so they actually go to NARSO meetings. Our supervisor's gone to the ACCT meetings, so, yeah, they've gone, you know, nationally, on educational opportunities and all that.

M: Wow, OK. And so, what do you think are the benefits of collaborating with the industry on risk management?

B: Yeah, I think, yeah, the ultimate thing is, um, having a real good understanding of what you're regulating and, through that understanding, um, you're building, you know, not just the knowledge, but the trust, um, and being able to, kind of, focus on, on what is, what are the critical elements and what do you need to, yeah, regulate and have oversight on. Um, and that'll actually help prevent, um, yeah, accidents and injuries, yeah, that's the whole purpose of why you're regulating in the first place, is to prevent accidents and injuries. So, I think, it helps with the collaboration in that there's so much more understanding through this relationship and the dialogue and the sharing of information, um, at least from a regulatory standpoint, that is, also, that we're not just here, kind of, making rules that don't have a real purpose on safety.

M: OK. Yeah. OK. Yeah. So, you... you help the gov, the industry, as such, yeah, with it. You're a helper and enabler, I guess, rather than...

B: Yeah, and again, I'll, our primary interest is the public. We're actually here to ensure the public is safe and I think by collaborating with the industry we can do a better job of ensuring the public is safe, than not collaborating with industry and being at odds, kind of, fighting and stuff. Because, I think, what we also get, um, what I've seen is, through our engaging process on our stakeholders and all that, we get, I find it's been easier to get support for changes to our rules, because industry realises it's in their best interests also to [inaudible].

M: Yeah and I guess that actually leads on to my next question is, um, what do you believe is required for collaboration to work?

B: Um, I guess it starts with the willingness to want to collaborate, um, but, but I think it's just being, um, I think, um, from a regulatory standpoint, being willing to take that first step and reaching out to engage with those that we're regulating in, like, a non-confrontational manner. Um, yeah, and early, um, kind of, I think, yeah, um, yeah, having good communications, yeah, listening and, um, respectfully, to their experience and their point of view and being able to, being open to ideas and changes and all that.

M: Right. Yeah. And, again, going back to leadership, how important is it for, um, how important is leadership in effective collaboration as well between the, I guess, state and the, um, industry?

B: Oh, I think that it has to start at the top. Um, it has to be, at least, that it's of value, um, right at the top, that's the philosophy, or the mind-set, on, you know, "we'll be better and

have better rules if we have better information through collaboration". So, yeah, it has to be supported and all that right from the top.

M: OK. OK. Right, but, given that, um, most of the operators, um, most of the stake, industry stakeholders, are small-to-medium enterprises, how do you believe this may impact collaboration, um, within the industry? I guess, because, they have a lot more time and finance concerns.

B: Yes, so what we, what we clearly have noticed is that, um, to be, yeah, especially with small, smaller operations, they have finite amount of people and, yeah, their time away from the business is extremely important, um, of value, yeah, and so, just being mindful and that and, and trying to schedule our meetings, um, being very conscientious about time, um, and even time of year, yeah, like trying to have to have discussions during, like, slow periods. So, like, [intentionally left blank], you know, industry really slows down in the winter and so, that could be, you know, the time when it's easier for those business owners to take time away from their, um, daily operations and spend with us. Um, and, um, so I think that that's, kind of, a critical factor to be mindful of that. But, it doesn't have to be them coming to a big meeting downtown here. You know, our inspectors are getting feedback on site, you know, like, while they're working equipment or something and that's as equally important.

M: OK. Wow. So, but, um, how do you believe that, um, I guess, bearing in mind that you have these meetings and so on, how do you believe that you can motivate industry to participate in such a collaborative arrangement?

B: Yeah, so, um, again, I don't want to sound like it's all rosy. Not everyone comes to those meetings. Not everyone wants to collaborate.

[Laughter]

B: Um, but I think, um, what, what, what I've found has been effective is just, kind of, building... um, you know, the recognition that, yeah, this agency is really interested in hearing from you and it's going to value that, your feedback and what you have to say and consider that and just the reputation that, kind of, builds from that. Um, yeah, it's not just coming to a meeting and no one is going to care about what you say. We're actually going to listen and engage and consider their feedback and thoughts and what not and, and I think it's that reputation the agency builds, you know, a trusting relationship over time, that, that helps people come to it, that peers are influencers too. Like, when we're dealing

with a particular amusement ride group, usually they might reach out to their peers, that are operating similar devices, “hey, the state is having a meeting” or whatever “we should go”. Yeah, and again, we don’t, we never 100% representation, but we’re looking for, kind of, key stakeholders, people that actively engage and represent larger interests, because there’s, there’s not really a major association, I think, with all the variety of rides here, that, that comes to our meetings, but, um...

M: Right. So, um, one of the things that I’ve come across, um, as I’ve been doing my research, is that, um, some people have mentioned that, um, something like an industry-body, um, in combination with public and private stakeholders, that focusses solely on improving risk management procedures within the industry. That’s something they would like to see. Is that something you would see beneficial?

B: Yeah, I think we, we would see that, um, beneficial. Sometimes, we hope, like, ACCT, NARSO, AIMS and all that take more of an active role, because they’re already setup there, because they represent a variety...

M: Because the infrastructure is already there, yeah.

B:... and, but I don’t think that the... or at least we haven’t seen them engaging to represent their membership as much as we’ve seen in other industries that we regulate.

M: OK. That’s an interesting point. Yeah. So, how would you like to see it implement then, um, if you were to create such an industry body?

B: Yeah, I, I think, yeah, I think having, like an, like a national association or something, um, that, that has some fundamental, um, mission, like, “we’re here...”, like you said, “...for better risk management” and that can bring, either through membership or through, like, lobbying for a certain group, um, be a participant with, with the different states, um, that regulate these devices. Because, not every state regulates the... um, the, um...

M: The aerial adventure, yeah.

B:... there’s not like a federal industry body that, that has, other than, like, consumer product safety, there’s nothing like that that’s a program that regulates all of them.

M: Is that something you see, something, like, on a more federal level rather than a state level?

B: I’m not, like, I’m not sure, I don’t know if it’s necessary. Like... I’ve never really thought too much about that. There is no, like, “here’s a minimum standard across the US for all...”

maybe that would be helpful. If that were the case, then you wouldn't want to have, like, duplicity. You wouldn't want to have these owners having to get a federal permit, then a state permit.

M: Yeah, for sure. No, it's just that, again, in my research, so far, it looks like only about 15 states have some form of regulation on the aerial adventure parks, um, which I find, um, really quite, um, amazing actually, um, considering, um, the type of activity and so on.

B: Yeah, and I think that that's the concerning thing, because, you know, people operate in a state that doesn't have any regulation and then not realising that, "hey, in this state they're regulated, but in this one they're not".

M: Yeah, exactly. Yeah. Um, so, um, and, um... where do you believe, again, going back to this, um, safety committee or, um... where do you believe that the control of such a collaboration should lie? Do, do you think that it should be, um, I guess, the state or federal in control of it or, just, very much in conjunction with industry? I don't know if that question makes sense?

B: Yeah, so I can only, kind of, answer for myself. We would... the control lies with the regulatory agency, not, not on, um, not on, that organisation. I think that organisation can act independently and have their own membership and work with a common interest. But, I think through collaborating and... um, to me, the value of, like, that association that, that, um, has, like professional association, is that they have, like, a unified voice to raise a concern to the regulatory agency, for instance, that, "hey, you need to address this" as opposed to, yeah, one operator saying, "hey, this is a concern" or one public citizen, or somebody. Um, so, I think it helps with that unified voice and representing the interests of, of the industry or the manufacturers. I think it's just more organised and, and beneficial politically as well as... yeah.

M: For sure. I mean, do you think that there is lacking a lot of organisation, currently, in the aerial adventure industry?

B: Again, it's, it's so new that we haven't had... like ACCT members engaged with us, which is good, but I just don't know, for sure, if they are, like, the association that you're describing for the aerial adventure courses or... are you aware of other ones?

M: Well, there are other ones, but ACCT and ASTM are certainly, um, the largest ones. No disrespect to the other ones of course, but the states that do look at, um, from what I can understand, the states that do look at, um, at regulating the industry are mainly looking at

ASTM or the ACCT and what I was going to say was that, you know, you know from yourself, obviously, that if you look at the amusement rides, you have, it's the ASTM you talk to isn't it? That's the one organisation you go to...

B: Yes.

M: [...] and we don't have that in the aerial adventure industry, it's all over the place sometimes.

B: Yeah, yeah. And, um, so, like, I mean, now, we would talk to, like, ACCT and ASTM, because we talk to both for an answer, and invite them and all that to engage, but yeah...

M: Well, [intentionally left blank], I have two more questions and that's it.

B: OK.

M: Um, so going forward, um, what do you think the future looks like for the aerial adventure industry?

B: Um... I don't know, I think it looks, um, it could look pretty bright. People are always seeking thrills and excitement, but I think, kind of with any new industry, especially with an industry that operates, um, at a high risk, it's, it's important to, to, um, kind of, to start on the right foot to have a good reputation for safety and then being, probably, I think it would be helpful if there was, like, more collaboration among the industry and, like, unification and lobbying together and developing... like, even now, you have the two standards, should there be one? Um, and um, but yeah, I would say it'd look very bright if, um, you know, small things... accidents can, kind of, tarnish that image and cause additional regulatory oversight that may impact how it grows. So, to me, I think the sky's the limit with, yeah, coming up with new innovative ways for thrills and rides. Um, and to me, yeah, just investing in making sure that it's, it's good, safe standards and, almost like, somehow, like, policing the industry. That that's might be helpful, so you don't have some bad apples that [inaudible] the reputation for the whole industry.

M: For sure. OK. And, again, that's where something like the safety committee could, um, come in. Um, just out of curiosity, how many parks, do you know how many parks you have in [intentionally left blank]?

B: Aerial adventure or...?

M: Yeah.

B: [...] or just overall? No, I don't know, off the top of my head. We regulate, like, over 200 amusement rides devices. So, I think it's maybe... I would think it's maybe under 20, so, but I'm not...

M: Yeah, no, no, that's cool. Um, in terms of your, your involvement as a public stakeholder, do you, do you see any changes or developments, um, going forward?

B: I think, um, for us, at least in [intentionally left blank], with, like aerial adventure, it's, you know, we're kind of learning on the fly...

[Laughter]

B:... as, you know, as we're going to try and stay, keep up with what's going on and really learning what, you know, where the emphasis needs to be. Um, sadly, sometimes you're learning through accidents, so, um... I don't know, it's somewhat like learn-as-you-go.

M: Yeah, for sure. That's a process that a lot of operators have had as well.

[Laughter]

B: That's, kind of, where we are with respect to that, so...

M: OK. Well, [intentionally left blank], thank you very much for your time. This has been really good. Really good conversation.

B: OK.

M: Um, do you have any questions for me at all?

B: No, I, um, don't have any. Appreciated your questions. I'd actually love to see what you found, because, um, how we engage with stakeholders, you're another resource. So, are you actually in the UK now?

M: I am, yes. Um, I live in Nottingham, but I study in Manchester. Um, are you familiar with it at all?

B: Um, a little. Very little. I'd have to go and look at a map.

[Laughter]

M: So, um, yeah, so I am in the UK right now. And, um, what you were saying before about resources, like I said before, it's been very impressive on how you deal with, um, with the industry and I think that there are some of the other states that I've spoken to could certainly learn from you guys.

B: Yeah, is there anything in the UK or Europe?

M: Yeah, there is a European Ropes Course Association, I think it's called and in the UK we have, um... we mainly have, there's one big brand called Go Ape, they're in the US now as well. Um, I think they have 40 sites here or something like that in the UK, so they're mainly the, they're the main brand and then there are some smaller operations as well, but there is no doubt that the US is where everyone is headed now, um, because of the size of your country, the size of your economy and how many parks you can have.

B: Yeah, because, yeah, I, I, we always, kind of, we focus, obviously, more on our state and the US, but I was curious. Like, we did some work with TUI in Germany...

M: Oh, OK. Yeah.

B: But, on some of the amusement devices. It's interesting to look at some of the standards that they...

M: Well, I know that the ACCT talks to the European Ropes Course Association as well, which I think is good, you know, the different continents talk as well. Um, because, it originated, the commercial side anyway, it originated in Europe, so they have a few more decades of experience than the US, obviously.

B: Yeah. But, yeah, it was a pleasure talking to you and, um, if you don't mind, if you could keep us in the loop when you publish your stuff, that would be great.

M: Yeah, most certainly, [intentionally left blank]. Thank you very much for your help. Have a good day.

B: Yeah, you too. Bye.

M: Bye-bye.

Call ended

Participant 11 Conversation

B: Participant M: Me

B: Hello, this is [intentionally left blank].

M: Hey, [intentionally left blank], it's Marcus Hansen. How are you doing?

B: Good. How are you?

M: Good. Um, I'm very well thank you. Is this a good time to chat?

B: Yeah.

M: Good, good. Um, thank you very much for taking part in my study again.

B: OK.

M: Um, before we start I just wanted to run through a couple of checks, um, basically, just a reminder that I am recording the call and, um, like last time I'll send a copy of the recording of the interview to you, um, and I'll also send, um, I will also send the, um, transcript to you as well and obviously it's all confidential and, um, any potential identifiers I'll leave out of the interview as well, um, of the transcript.

B: OK.

M: Um, so, does that sound alright to you?

B: Sure.

M: OK. Do you have any questions before we start?

B: Um, no.

M: OK. Great. Um, right, well let's dive right into it then.

B: Alright.

M: Um, please tell me about your role within the organisation.

B: Um, I am the manager and the majority owner.

M: OK. Um, and how long have you been involved in the aerial adventure industry?

B: Um, five years.

M: OK. Um, and is this a, um, do you, do you do both commercial and educational or is it mainly commercial you offer?

B: Um, by educational, you mean, um, what?

M: Um, team building and so on. Um, the traditional type, if you like.

B: Um, probably over 90% of our business is commercial, um, but we do have an educational component of about 10%.

M: OK. OK. Um and so what do you, what do you believe is the key attraction to the aerial adventure parks?

B: Um, it's different than anything else available. It's not, um, a traditional thing that people get to do on a frequent basis.

M: Right. OK. Now, um, according to the research that I've done, there's, um, there's a lot of talk about the thrill-seeking experience, um, that participants go through. Um, how, what role do you think this, um, risk-taking, thrill-seeking experience plays in the overall attraction of the aerial adventure parks?

B: Oh, I, I think that's a, um, very important piece of it. I think if it was, um, something that was boring, um, but unique, I don't think that we would get as many people. Um, so I think, um, the fact that it's exciting, um, and that, at least from our, our park, most people physically and mentally can't complete it, so, it's a challenge and, um, so I think that's what drives people to, um, try it and, um, come back if they can't complete it.

M: Mm. Um, just out of curiosity, [intentionally left blank], do you find that it's, um, it's mainly families or, um, what's your demographic like?

B: Um, our demographic is, um, it's a lot of families. I would say it's 30% families, um, probably 50%, um, friends, work, co-workers, um, acquaintances, um, and there maybe a couple of family members in there. So, really the, usually what we get is, you know, a group of 4-8 people, you know, two of them might be related and then the others are friends of theirs. Or, it might be a group of 10 and 3 are brothers and sisters or moms and dads and the rest of them are friends. So, it's, um, it's generally, um, groups of that. But, again, the other 20% is corporate groups of 50, corporate groups of 10, school groups, um, church groups, um, youth, youth church groups is a, um, big group.

M: OK. Um, so, it's, even though it's kind of an individual experience, it's also, kind of, a social experience, is that correct? In terms of...

B: Yeah, right. I would say that, um, no one, no one comes to do this on their own, um, but everybody experiences it differently, um, individually. But, um, the group dynamic is, um, very influential, um, for both people to push their limits, to go as far as they can go, even to try it and so on?

M: Right. And do you think that's quite important? This thing about, you know, pushing one's own limits and so on?

B: For us it is. Um, for our, for our brand our style it's important. Um, there are other parks that I am aware of that, when you're done with it you had fun, but you're not, you're not especially tired or you weren't especially challenged. You might be afraid of heights, but, you know, either they weren't that long or they weren't that hard. Ours is hard and it is [inaudible] elements.

M: Oh, wow. OK. Do you find that a lot people have second thoughts when they get up there?

[Laughter]

B: Um, I don't know if they have second thoughts, but I think that they, they... we just try to make them feel comfortable, and go as far as they can go, um, and, um, and then we have to go get them.

M: Right. I just remember, I just remember the first time I tried it, I just thought, "oh my God, what have I signed myself up for?" right?

[Laughter]

B: Yeah. Yeah.

M: So, um, how would you, um, how would you define risk?

B: Um, risk with regards to safety of cust, guests and staff or risks as far as a business?

M: Um, I think, well the reason I ask is because of this, um, unique relationship, I guess, in aerial adventure parks, because you have customers that want to push their limits, like you said, and feel this adrenaline rush, but at the same time they obviously don't want to get hurt. So, yeah, I guess, what is risk to you?

B: Yeah. Well, I think, I think for us, the, the balance is, um, we're not having them do risky things. We're having them do, um, things that have perceived risk. You know, they're, they're clipped in, um, so they're not going anywhere, but, um, how do I explain it? The...

most of the challenges that our course provides is, is physical and then, um, mental from the standpoint of, you know, you're up there for 3 hours, so your adrenaline can only go for so long and then, you know, the adrenaline runs out and then people get scared and tired and so on. Really, it just has to do with the, the physical tiredness. So, it's not like they're hanging above an alligator!

[Laughter]

B: And when they get tired they fall into the alligator's mouth. You know, um, they just sit in their harness and, and, um, we come and get them. But, they are, they are high up in the trees, so, it's, it's more perceived risk, um, than anything. And, and we don't... um, in terms of risk we try to minimise any of the actual, um, real risk. Um, you know, in terms of injuries, periodically. You know, we've had a couple of broken fingers over the 5 years, um, mostly because people didn't follow the instructions and put their fingers where they shouldn't go, um, and a couple of dislocated shoulders, um, but those, the, every one of those, um, were people that already had dislocated shoulder issues. Um, so they came down, we rescued them, they came down and they popped themselves back in place and...

M: Oh, wow!

B: [...] um, of course didn't go back up. But, um, you know, and, and so we don't, um, you know, we... it's not like people are bashing into the trees and they're not, um, getting yanked in the harness. But, I think, you know, that's all minimised, but I think it's, it's just the, um, physical nature of moving across unstable elements that tires people out and, and being up high with the adrenaline tiring people out. Um, and it's tough to get through. Um...

M: Right. So...

B: So, I don't know if I'm answering your question.

M: Actually, no, you are! So, yeah, no it's really good. Um, so, and I think you've just touched a little bit on this, but what would you say are the key challenges that you face in risk management?

B: Um, you know, for us it's, it's really just having... making sure that we're inspecting the course properly and, um, the equipment and that the, um, guys follow the rules also, set good examples for the guests and then, also, the biggest risk are the guests doing, um, breaking the rules and, um, having an, an accident. So, um, we, we, um, verbally explain to

them the rules, we have them sign the paper that explains what the rules are and then we have them, um, we demonstrate to them and then they demonstrate to us that they understand. Um, in addition to that, our course... um, our adventure course is broken down into 5 courses and you do them separately and, um, the first one is lower to the ground than the last one. So, by the time you get to the really high one, you've clipped in and clipped out, you know, many, many times, so you're used to it and so we find that that, if people are going to make a mistake they, generally, do it in the very beginning and so we can catch it and so on. So, that's, you know, making sure that the harnesses are, are fit right and, um, you know, our, our adventure course we monitor from the ground, which I think is standard, and we look, um, at the people and our guides are encouraged to interact verbally with the guests, encourage them and talk to them, you know, if they have any questions. Yeah.

M: So, um, your, your guides play an important role in the experience as well, overall experience as well then?

B: Yes, I would say that. Um, what... it's a challenge. Um, most of our reviews, if you look at TripAdvisor or Facebook or Yell, they usually mention, you know, "the guides were excellent" or they'll mention them by name, or, if we get a bad review they usually mention the person. Um, so, so people really appreciate, you know, um, that, they'll say, you know, "I was... I couldn't have made it without the rescue guys, you know, giving me encouragement" and so on. And, and, they really, the guests really love that interaction. At least, some of them do. Some of them don't want us to say anything, which is fine, um, yeah, because they want to do it themselves or they, they just... don't want that. But, the vast majority appreciate a tip or they appreciate some nuance of how to do something, um, how to get through an obstacle and, and so on. And, um, one of the challenges that you have with, um, the movement to, like, we use slide-lock carabiners.

M: Oh, OK.

B: Yeah, we don't use, um, we don't use smart-belay, we don't use ClicIt or Bornak or Edelrid, um, at this point and, and one of the concerns that we have, um, switching to those, um, types of equipment, we don't necessarily have to have the same amount of guides, you know, watching, because of, you know, they're clipped in. And, also, I think that, one of the concerns we have about that is that, people, if they think that there is no way to double-unclip themselves, um, somehow they'll find a way!

[Laughter]

M: Yeah.

B: If, if, if you don't... I think people appreciate that they can open the clips that this is a life issue, you know, that, that they take it seriously and when we say, "hey", you know, "You need to pay attention". Or, if they see us stop someone and say, "OK, you know, you've had your, your warning and you just did it again. Please stay there and we'll come and get you and lower you to the ground". Everybody is very appreciative that, you know, we're watching that and I think that with the continuous belay or smart belay, I think it changes the experience that our guests will have. Um, and not, not that we can't deal with that, it just will... and I think at some point we will change to that, but we're just, it's just that... one it's very expensive and, and two, it, I think it will fundamentally change the experience. Um, take away some of that perceived risk.

M: OK. Yeah, that's what I was going to ask, is, um, if you felt it was, um, take a level away from the experience, almost, to move to the smart belay.

B: Um, I think, I think that in talking with my staff, they, they fully believe that. That, that, people will, um, they won't understand why we're watching them and, and so on. Um, but I also think that they're good, I just think that, um, it's a little bit different experience, um, then.

M: Um, yes, for sure. Um, and you said that, um, you will actually, um, get somebody off the course if they, um, unclip themselves a couple, um, numerous times?

B: Yeah.

M: Oh, wow. OK. Yeah, do you see that happening a lot or?

B: No, um, it doesn't happen that often. Um, in, um, in the summer, in the busy season, when we have, um, just as an example, if we have 4 or 500 people go through in a day, we'll probably have 1 person in, on those days.

M: Oh, wow.

B: So, it's maybe one every, um, you know, one every 1000, one every 500 that breaks a rule twice. So, um, if they break it once we tell them, "hey, you broke the rule, we're watching you". We tell people, our staff, by radio, you know, "this person, black t-shirt, white shoes, has a warning" so they watch, um, and then if it happens again, we stop him. We go up and get him down. And, and...

M: Oh, wow. That's really good.

B: ... most parents, um, are very upset when we bring their children down and, um, but that's, that's life.

M: Right, yeah. They don't see that it's for their own child's safety.

B: Right. Yeah.

M: OK. Um, so, um, to you then, what does effective risk management look like?

B: Um, consistent adherence to, um, maintenance and inspection, um, rules and, and operating procedures and, um, equal enforcement of safety procedures from staff and guests at all times, from, from the beginning of the day to the last guest and the last staff member coming down, out of the trees. Um, and, um, consistent application of our, of our warnings and, um, and good training on, um, for our rescue guys who, who bring the people down that can't go on and also good training for our ground-based patrollers who are, what, what to look for. Um, mostly, like we don't even really look at the clips anymore. We're listening and looking at the hand action, because the way your hands move are more indicative of what you're doing with the carabiners than the ability to actually see what you're doing with the carabiners.

M: Oh, wow. OK. Wow. I wouldn't have thought... wow. OK. Yeah, that's quite an amazing detail, actually, that, um, you've been able to train yourselves to, to look for that. Yeah, that's really cool.

B: Because, the way that our, the way our carabiners are, they're opposite, um, so, you basically need one coming from the left and one coming from the right and if we... almost out of the corner of your eye, if you see someone doing things different from that, then you look and see and maybe they're, maybe they're clipping in with both of them the same way, which is OK, but they should be, should be opposite gates on the carabiner. Or, or they clip one and then you don't see the other hand move and sometimes that means that the other carabiner is in their hands or it's dangling down and they're trying to unwind or, or untangle the lanyards and then you want to watch to make sure that they clip that one back in before they unclip the other one. So, there's a lot of... the hand movements are in some ways more a tell-tale sign of odd movements that would be, um, dangerous.

M: And, and why do you have the carabiners opposite, sorry, [intentionally left blank]?

B: Well, um, the side that has the opening, if you have both of them over the safety cable, headed in the same direction, someone could, in theory, open both of them with one hand and, and pull them both off. If they're opposite, they have to use both hands to get them off and, and even though, in our case, our slide lock carabiners, you have to pull them down to open them. So, you can't really pull them off. You have to pull it down, open it and then lift it up. So, you have to do something pretty stupid to, to do it. Yeah, so...

M: Oh, OK. And so, um, earlier on you talked about, um, your inspections and so on. So, um, what procedures do you have in place to, um, to, kind of, work on identifying and assessing and responding to potential risks?

B: Well, we have our operations manual from the, the, the course constructor, um, and it says, um, we inspect the harnesses visually when we hand them out and we inspect them in detail every month and we have a log. We have, like, a birth certificate for each harness and the history of each inspection and, um, so if you said, "I want to see the history of harness number 302", um, we could tell you, you know, on April of 2014 we replaced the carabiner there, or whatever the case may be. Um, and then when they get retired, we destroy them. Um, and, um, I'm working on trying to make them into belts, but, um, it's hard to do. Generally, it's difficult to recycle harnesses, because you don't want to use them for harnesses anymore, when they're done. Um, so that's the harnesses. On the course we do a similar thing, we have [inaudible due to bad signal].

M: Sorry, [intentionally left blank], I think it's, um, a bad line at the moment.

B: Better now?

M: Yes, I can hear you now. That's good, yeah. Sorry, what were you saying?

B: I was saying, as far as course, um, inspection, um, we have people work in pairs and they have a radio and as they go through checking the bolts and the wood or whatever, if they find some type of issue, um, usually it doesn't have to do with the life-safety cables, because those are, are forged and torqued and so those never... move.

[Laughter]

M: OK.

B: Um, but it has, like if you're walking across a bridge or planks, they just have malleable U bolts and sometimes those come a little loose and so, they'll radio in, you know, "third plank, right U bolt" and so we document and then the, um, maintenance guys, that work

for us, whoever is called... the maintenance people, you know, we don't have separate maintenance people, they're just our people, they go out and, um, we call them the "tech team" and they go out and they fix all the things that are found and then they check them off as they go. And, um, you know, wood wears out, so we'll, um, we'll replace a board, um, a log, whatever the case may be. Um, so, yeah, that happens. On a daily basis, um, we're just checking for... um, like, if a branch fell onto the course or, you know, something obvious that would cause an issue. Monthly, we go through that detailed inspection and then annually we have an ACCT inspector, um, come and check and then, um, the company built it does the maintenance, um, to fix it. Yep.

M: Oh, wow. OK. So, you have, you do your own inspection and then you have a third party inspection as well?

B: Yes.

M: OK. So, um, I guess, bearing that in mind, um, what role or impact would you say that risk management has on the overall strategy of your organisation?

B: Um... I'm not sure about that question? I don't... what does risk management have to do with the strategy of our company? With regards to making a profit? Or, or, um, I'm not sure where you're headed with that.

M: OK. Um, I guess, I'm thinking about the objectives you have and your, your organisational culture.

B: Oh, well, I would say that our, our first, um, strategy or first value is safety. So, that's number one. And, and it's interesting that we always have to be very strict with our staff, because they're the ones that tend to get complacent.

M: Oh, really?

B: Yes, because they're so used to it. You know, they're so confident that, that, you know, "oh, I can only use one clip" or whatever the case might be. They also only get one warning and, um, if we see a violation they have to leave work for the day and, um, and then we'll talk to them again. If it happens again then, then they're let go. We can't... they must follow the rules.

M: So, you, you start with the staff and then that reflects on to the customer, if you like?

B: Yes. Yes.

M: OK. Yeah. So, um, how do you monitor that your procedures are being followed throughout the organisation then?

B: Um... well, everything we're doing is, um, transparent and, um, the same people are not doing the same thing all the time. So, people rotate. So, if John is sitting with Susie checking harnesses and, um, and the next time it might be... someone else, you know, Jim with Rebecca doing harnesses. So, people try to do things the same way, because, what will happen is, if someone says, "hey, I think this harness, this harness, um, carabiner, needs to be monitored", the next month those inspectors can't say, "OK, now this carabiner is OK". They, they know, they will, they will see in the, that the carabiner was to be monitored and so, so they're going to say, "Well, let me look and see what the issue was" and so on. So, I think by not having the same people doing everything all the time, it's difficult to get complacent. You can't, "oh yeah I saw, I've seen harness 150 10 times, so it's fine. I don't even need to look at it". Um, but when we change people around then they have to look at it. Um, when we're inspecting the course, then we have pairs of people inspecting and they're usually different pairs. And then, also, the managers do a, um, a random spot check. So, they'll go up. They'll go look for things. If they found something that wasn't caught by the inspector, by our inspectors, they'll, they will report that and it will be fixed. If they find two things, then, they have to re-inspect the entire course, um, of that. So, that's... so we, kind of, do audits and checks and not having the same people check the same thing all the time.

M: OK. OK. So, um, in terms of communication, um, between management and staff, um, what lines of communication, basically, um, do you have, um, between your front-line staff and upper level management?

B: Um, well we don't have much of a... there's really not a difference between front-line management and upper management. Um, the managers are also out with the guests and they do, they watch guests, they provide, they do the demonstrations. But, what they do, is they move between the different areas. So, they'll be outside for a while, they'll be inside in the office for a while. So, they're moving around, the management, if you want to call them that. And then, um, and then, everyone is on a radio in, um, in their ear and so, they all communicate, um, that way, and we have to be very... um, team work is very important. Um, the way we interview and hire people, because it is, um, a lot of the people we hire are here for a year, um, one season or two seasons, and then they move on with their lives. So, we look for outgoing, um, very communicative people and, um, we try to make sure

that, um, they fit in with the group, um, in terms of... one of the ways we do that is, um, when people come to interview, they need to go, walk out and introduce themselves to everybody that is working and talk a little about themselves and, then, everybody on the radio, um, gives feedback back to the interviewer while that person's out there. Um, it could be, like, were they able to have eye contact? Are they smiling? Are they interested? You know, things like that. We don't have a very, you know, we don't have a hierarchical structure. Um, really, it's very, very flat and, um, yeah.

M: Yeah. Yeah, that's what it sounds like. I was just sitting there thinking that it sounds as though, when you hire, the whole organisation is really involved in it.

B: Yeah.

M: Now, and you just mentioned, are you a seasonal operator, [intentionally left blank]? Or are you open year-round?

B: Well, we're open all year around, but as an example, right now there is two feet of snow!

[Laughter]

B: So, um, in December, January and February, we're only open on Saturdays. And, so, we were, we were open on Saturday and we had guests, and this, this weekend we're actually open Friday and Saturday, um, because there's enough demand. Even though there's still two feet of snow on the ground and it's really cold. Um, but so, from March first to, basically, end of October we're open every day and then in November we're open Friday, Saturday, Sunday, plus, in the US Thanksgiving. And, and, um, then December we just go to Saturdays. Um... and, because it's difficult to market, because we don't know if there's going to be a snowstorm. I mean, when it's, because it can be 20 degrees up there, it's too cold. And so, we don't, we don't market... we don't really push that we're... basically, the only, the only marketing we do is, like, Facebook posts, "hey, we're open" and that's about it, you know.

[Laughter]

M: No, that makes a lot of sense. Especially in 20 degrees! Yeah, that makes a lot of sense. Um, now on the communications side again, [intentionally left blank], do you have team meetings as well and so on?

B: Do we have what?

M: Um, team meetings?

B: Oh, yeah. Um, we have, um, we have informal team meetings. In the high-season, probably, once every two weeks and then we have formal, we have a formal beginning of season meeting, um, in, um, in April and then we have our end of high season meeting in November/December and that's when I give an update, a financial update and where we're headed and what's coming down the pipe and what do you guys hear and what do you guys want? Stuff like that. So, we have a PowerPoint, we have a, a business meeting, we do, um, a brain-storming on tweaks, you know, if we had any issues that came up, um, we talk about how to mitigate those. Um, or if we're installing... you know, if we're installing, like we're installing a new photo system, um, what do we, you know, what do we do with that, um, and so on.

M: Um, and in terms of, I guess, um, listening to the knowledge that your staff have and so on, how important do you consider this information and so on, that they inevitably have from being on the course every day?

B: Well, it's, um, it's the most important stuff. I mean, they're the ones that are up there. They're the ones that know how the guests are feeling. They're the ones that know if, if the guests think we're heavy handed or if, if we're, um, if we're too chummy, if we're too strict. Um, you know, so we try to listen and we try to give tips on... when people give you... if, um, if they say, you know, "I can't do it. I only got half-way, I want half my money back". You know, how do we deal with that? You know, sometimes we do a little role-play and, um, the other thing I tell them is that, that a customer, a guest, should never need to speak to a manager, that "you can address their concerns the way you think is best for safety and for the setting of precedents and, and, um, the manager of the day or myself, or whoever, we'll back you up and stick with that. And, if we think it's wrong after the fact, we'll talk to you about it, but, you know, we're not going, we want the customer to get an answer right away, that, that I don't want you to hide behind, "oh, I'm going to have to talk to a manager about that", because then, then there's no, then you don't have any power and we want you, I mean, since you're in charge of safety for those people, you need to be able to answer those questions.

M: So, um, and I know that you have a flat management structure, but how important, or what role do you think, then, that leadership plays in effective risk management?

B: Well, I think that most of it has to do with, um, being a good example. So, if my managers can't attend work on time or allow the inspections not to happen or, you know, "oh we can get to that some other time" or if they're attitude towards it is lacks, then it will

become lacks and... but at the same time I think that, what I've tried to do is instil in them that, "yes, safety is absolutely important, that is number one and we shouldn't sacrifice that all", but there is also a way to communicate with the staff and communicate with the guests so that you're not, we're not just shouting at them, that they're doing something dangerous. You know, like you don't go into a, um, you don't go into a theatre and yell "fire!", you know.

[Laughter]

B: So, you just want to be... there's a way that, like, we don't... if we see someone unclip on a platform we don't say, "hey, what're you doing?!". We'll say, "OK, everyone stop". You know, "person in the blue coat. Person in the blue coat, please clip yourself back in". You know, "this is your warning" and so on and so forth. And so, really the example that the managers play... and they're also on the radio, so they can hear the communication of, of the, um, staff and what's going on and...

M: Alright. OK. OK. Um, and so, in terms of the standards that you follow. Um, you said that you have ACCT inspectors. Is it ACCT standards that you, you follow as well?

B: Yeah.

M: Um, is it, um, how does, I guess, how does the state, um, influence risk management procedures in your organisation? Or do they at all?

B: The state... does, um, [intentionally left blank], doesn't have a, um, um, anything about what we do. But, the county that we're in, we're in a county park, so what we, what our agreement was with them, is that we will operate the park according to the manufacturer's requirements and the, and the manufacturer's requirements are that we inspect every year, we inspect it every month and so on and so forth and then we provide that information to the county.

M: OK. So, um... OK, I see what you mean. Now, in terms of looking at the wider industry, how would you say that an incident at one park might affect the rest of the industry?

B: Hmm... well, it seems like it would affect the rest of the industry, but it doesn't seem to.

M: OK. Yeah?

[Laughter]

B: Um, um... I think that, um, people that are concerned about those incidences tend, tend to... they would be concerned about anything, if there were no incidences, you know. But, I mean, we don't like to hear it. We like to, we try to find out what happened, but that seems very difficult. Um, I think there was a death in Kentucky or Tennessee or somewhere, the Carolinas. Um, a person, sort of, I think, hung themselves, but then they got him to the ground and then he died. You know, but we don't, you know, people said it was, um, the smart belay, but then other people said it was a heart thing other people said that he... like, you know, I guess what I'm trying to express is that, the industry, as far as being a park operator, we don't benefit, I have not seen, ever, a definitive report on any accident that leads us to change anything we do, um, you know, like there's no ever definitive story, like, "what really happened?" and "how could it have been prevented?".

M: Is that something you'd like to see?

B: Oh, yeah. That would be great. Not, not because we're morbidly curious, but, like you know, one of the things that we heard was that the, the, I think it was Navitat, or whatever, um, the used too long of a, um a lanyard from the harness to smart belay carabiner system, and that allowed this to happened. But, then we heard something completely different and it's, like, "well, if we're contemplating, you know, using a different system or different builders, or whatever the case may be, if there is no independent... so what did the insurance company say?".

M: Right.

B: Um, and then, I guess, the other thing would be is that until there's a difference in insurance rates... for smart belay or continuous belay versus regular carabiner or lobster claws, then, then the insurance industry is saying that there is no statistically, there's no statistic difference between those technologies, you know. So, there's... what we're hearing is, you know, "oh, you know, Edelrid is the safest, or ClickIt is the safest or continuous belay is the safest?". Well, if that was the case, wouldn't you get cheaper insurance? You know, from the actuarial tables?

M: Right. Yeah.

B: I don't know. So, I think those are...

M: No, but yeah that's a really good point you just made. Um, out of all the interviews I've done, nobody's said something like that.

[Laughter]

B: So, um, so I guess, back to what you're saying about, you know, there are, there are these incidences. We try to learn. I think one of the general themes is that a lot of... a preponderance of the incidences over the last five years have been staff, not participants, but staff-related incidences.

M: Oh, OK. So, staff getting hurt, rather than participants?

B: Right. So... so, that's, that's something where we always use those examples of, "you guys need to follow the rules or, you know, this can happen" etc. etc. right?

M: OK. So, do, do you collaborate, then, with other organisations within the industry at all?

B: Um, yeah, I mean with the builder of our park, we collaborate with them on information and some marketing stuff, um, but not, not... not too much, because we're so, geographically, disparate. There really is no, there really is no competition, but in terms of safety or risk management, you know, if the builder, the builder of our park says, "you need to change this procedure" then we change that procedure. You know, recently they've changed one of the ways that we have to take, the, the type of equipment that we use when we lower someone from a certain type of element and so we retrained on that and so on.

M: Right. OK. Um, I mean, in terms of...

B: But, it...

M: Oh, go ahead, go ahead, [intentionally left blank].

B: I was just going to say, I don't... we don't call, you know, we don't talk to each other about, "hey, you had an injury at your park. What did you do to resolve it? What happened?". They're not going to tell you anything, because of the legal issues, right?

M: Right, OK. Um, do you talk directly with ACCT at all or is it straight through the builder?

B: Um, through the builder. I don't really talk to the ACCT, no.

M: No. Um, in terms of the, um, the knowledge that you obviously have from operating, um, an aerial adventure park, on an area such as risk management, how would you feel about sharing that knowledge with other operators and builders?

B: Yeah, I mean anything that... I would be happy to, you know, if there was an ability to just talk about that stuff that would be great. But, everybody has to, you know, people's courses are built a little bit differently, you know, they use different safety systems and people, people get, um, very particular about how they think, you know, the way they build ziplines is better than the way this guys builds ziplines, so it's kind of a weird industry, really.

M: So, I mean, can you describe any levels of collaboration within the industry that you can think of?

B: Well, there definitely is a... the builders, I think, try to work with the ACCT to get standards defined. Um, and ACCT got, in America, has the ANSI approval or something I don't know. But, to me, there's a fine line between turning aerial adventure parks into a carnival ride, um, which I don't really agree with, you know, that, and, and in some states ziplines come under that and then with the ASTM standards it really, that really comes into play. Um, and I think on ziplines that's maybe a little bit different, because some of the real long ziplines, it's basically just a ride. You know, you clip in, you go and you're off. Whereas, an aerial adventure park is, you know, you're interacting, you're sweating, you're moving, you're actively moving between elements as opposed to just, um, a point-to-point, you know, 3000ft...

M: Right, is that why you, you think they're different from carnival rides, as well then? Because, you, you're actually doing something?

B: Yeah. Right.

M: Yeah, that makes sense.

B: I mean, in a carnival ride, you have, you're sitting there. Like, you're not supposed to move!

[Laughter]

M: Right. No, no, exactly. That's what I'm hearing a lot. There's a lot of concern about, you know, "we aren't an amusement ride, as such. There's more to it than that". Um, now, do you attend something like the ACCT conference?

B: Um, I have in the past. It's actually happening this week and I'm not going.

M: Right. OK. Um, do you find it useful?

B: Um, it's, it's somewhat interesting to see... the different technologies and put some faces with some names, um, but we're not a, we're not a builder and the ACCT conference, I think, is more for people who build to, to get some different certifications and then they do have some people that talk about marketing, but a lot of times... it doesn't seem like it's really geared towards commercial ventures, um, other than ziplines. Like, it seems like, if you have, um, a couple of really long ziplines, um, then there's probably something for you to, you know, talk about there, like photosystems and things like that. Like, an example of this is that a lot of the automated photosystems don't really work for aerial adventure courses, because, "what picture do you want? Do you want the picture on the cargo net? Do you want the picture on the Tarzan rope? The bridge? Do you want the zipline? Which picture do you want?". But, on the zipline, it doesn't matter if you're at foot 1 or foot 4,000, it's still the same picture, right? It's just you sitting in a harness. So, I think there's a lot of, even marketing and, and other things that go on, just related to the zipline stuff, or a lot of stuff related to, um, high ropes courses that do team building, um, and not...

M: So, the traditional type?

B: Yeah. I... it's interesting to go, but it's... I always come out of it with some information and I feel a bit closer to the industry, but as purely an operator... I... there's not a huge value in my mind.

M: Would you like to see a little bit more operator focus or a conference for, for operators maybe?

B: Um, yeah, but then you're going to get... I guess the other thing, the social part of the ACCT conference is everybody who operates stuff going down to the bar and talking about how big they are, you know.

[Laughter]

B: You know, and everything's grand and everything's perfect. Um, you know, so, I think, because everybody's in, um, in the commercial sense, in it to make money, it would be interesting to see how you would do that. Although, there isn't a lot, there isn't that much amount of competition, um, in, in different areas, so it wouldn't be bad, but I think everybody has the idea to build more and then there would be competition. You wouldn't want to be telling people where you're going next.

M: Oh, in that sense. I see what you mean.

B: Yeah.

M: Yeah. Um, but, I mean, do you see any benefits to collaboration on risk management?

B: Yeah, it would be great if people had... if there was even like a wiki, wiki-something, where you could look up, "hey, hey I've got Petzl Vertigo slide lock carabiners. Have you got any tips or tricks on, you know, risk management for those?" Um, one of the things that, that we use called the Petzl, it's I apostrophe D, an ID and it's a belay device. Do you know what I'm talking about?

M: Yep. Mhm.

B: OK. So, it's a thing where we clip into people and then we lower them down on a rope and, and we go through them... they're supposed to last years and we go through them in six months.

M: Oh, Wow! OK.

B: So, we, we talked to Petzl numerous times. So, we sent some back and they were like, "yeah, this one's worn out" and so we say, "Well, we've only been using it six months".

[Laughter]

B: And they say, "well, what are you doing with it?!" "Well, we're, we're lowering people. We're climbing up and then we're lowering people with it" and they go, "well, that should be fine" and then they ask us how many and then we're like, "well, we lowered 3 or 4,000 people last year with 5 or 6 IDs".

[Laughter]

B: And they're like, "oh, well, that's why". And, and you're like, "OK". Well, it doesn't, it doesn't say that. Like, in the documentation it doesn't really say, there's just a wear indicator that, when you hit a certain wear-point, you should take it out, you know, don't use it anymore. So, we're hitting this wear-indicator and we're like, "oh my God", you know, this things are \$150 a piece, so... so, you know, it was just interesting. We're like, "don't other parks have this issue?" and they're like, "no, they don't lower as many people as you do".

M: Oh, wow. That's interesting. Yeah.

B: Because, one of the things is that our course is hard, so we do have a lot of people we have to lower and then we also have, um, afternoon lightning in the summer and so we

have to do a lot of evacuations and, um, so we end up, you know, I mean, these things are... sometimes when it's raining they, they get steam coming off of them, because it's so hot.

M: Really?!

B: Yeah. So, we talked to Petzl and the other manufacturers of these belay devices and said, "Do you have anything for commercial ventures?" and they're like, "well, these are for commercial ventures" and we're like, "well, we're burning them up!".

[Laughter]

B: So, so, right now we just deal with it and we just buy new ones.

M: OK. They didn't make any changes or anything?

B: No, because it's doing what it's supposed to do and it's useful life is that much usage and normal, normal usage would say that it should last a couple of years, but ours is... um, we have abnormally high usage.

M: Yeah, so I wonder if...

B: Um, but...

M: Go ahead. Sorry, [intentionally left blank]. Go ahead.

B: Oh, well, what I was going to say about that if we could say, you know, if there was a depository or a place to, you know, we're not critical of Petzl. I mean, it's wearing out and that's, and we're taking it out of service and so on, but if people would know how do you deal with this? Do you use a different one? You know, do you a different, you know, made by someone else. Have you found one that works better? Is it less? Is it more? You know, if there was a way to bounce these things off, um, other operators that would be great.

M: OK. Yeah. So, do you think it's quite important, then, to be able to share that kind of knowledge and, I guess, ideas with each other?

B: Yeah, I would think so.

M: OK. Um, and so, and you just mentioned about, um, this, um, having something like a wiki or some kind of forum, um, that can connect each other, so, um, do you think that it would be beneficial to create something, I don't know, almost like an industry-body, almost, that just has a sole focus on risk management.

B: Um... I mean, what kind of... is it a regulatory body? Is it a set standards that we have to adhere to, that are... that maybe different than ACCT standards?

M: It could be, um, by the ACCT, but, like a, um, a, um, a place where you communicate with each other or communicate with that body, for example, and then they would be able to share that information with the rest of the industry and so on.

B: Um...

M: Like you did with Petzl.

B: Yeah. I, I think the danger that I would see, from commercial people like myself, that if I, if I post on there or I give them information, like, "hey does anybody have a longer lasting delay device other than an ID?", um, it may give people some type of information I don't want really want to put out in the public domain. You know, like I'm OK talking to you about it, because you said that you're going to anonymise it or whatever the case may be...

M: For sure.

B:... and it's more like, you know, I guess, um... you know, the way I mention it to people is, like, we'll just call them up and say, "hey, what do you guys think?". It's not, and it's just like one-on-one, so... you know, and then, and then people might ask stupid questions, you know, and then they'll be ridiculed in the industry or something like that. So, I think it's a fine line of how, of how that would happen and, and... um, so, I don't have any good ideas for you, really, um, on that one.

M: No, no. That's absolutely fine, [intentionally left blank]. Um, and so, I guess, bearing that in mind, what do you believe is required for collaboration to work, then, in the industry? On these areas, like risk management.

B: I don't know. Um...

[Laughter]

M: No?

B: That's, I think, I don't have any great ideas for that. Um, I wish I did, but, um... I think that...

M: It sounds as though... yeah, go ahead.

B: I, I was just going to say that, if there was a little bit better sharing of information from manufacturers and, or, the insurance companies about the reality of any incidences in a fact, in a fact based way, that would be great. You know, um, you know, when an incident happens... you know, where, not only... was there equipment, were there procedures that could've been, or should've been, changed. You know, maybe it was as safe as could be at the time, but now, um, you know, um, things can always be changed, but again, it gets into that insurance thing and the blame game and people getting sued and so on.

M: OK. Um, I mean, do you think that it's an issue, maybe, that there's a lot of small-to-medium enterprises as well? You know, in terms of the time and money that, um, collaboration kind of takes as well, or requires?

B: Um, yeah. I think that some of the parks, you know, they don't have a tremendous volume either, so, you know, their issues are probably a little different than my issues. You know, my issues is that things wear out and, and, um, just the volume of... guests and throughput... and usage is, is just... so fundamentally different than a ropes course at a university. You know, I mean, it's just, like, I have nothing to talk to them about. Like, nothing that they could talk with me about would be, um, of note, because it's just such a different, um, environment in volume and purpose and so on. You know, getting like-minded people together, I think it's great. You know, I think, um, what's his name? The US Go Ape guy... Dan...?

M: D'Agostino?

B: Yeah. You know, he sent out an email, a couple of emails about something, you know, with thought and so on and so forth. Um, I thought that was great and, you know, I responded to those and so on, but I think it can be done, but I think, um...

M: So, just out of curiosity...

B: It wasn't about risk management, I don't think, it was about some type of standards or operational standards that the ACCT was trying to impose, but was being, um, overly influenced by smart belay manufacturers. Um, you know, so that, it was, like, "wow, what are you doing? You're telling me, that you want the standard to be..." I think it was that we have someone watching, we have to have someone be able to see every single space on our course at all times and that's not how it works, or... so that's the operational bar if you don't have smart belay. If you have smart belay then you don't have to have that type of coverage and if you have continuous belay you only have to have x, you know, per

participant coverage, and it's like, "but, wait a second. No one's saying that continuous belay or smart belay or lobster claws are any more safe or less safe than the other. No one's ever said that, you know, or proven it or shown it, you know? So, why are we putting these, we are [inaudible] in the standard or an operational manual, when, when there's no, there's no reason to.

M: There's no evidence. Yeah.

B: Right, right. So, I think, those, those things are important.

M: Um, do you... just, again, out of curiosity, [intentionally left blank], was it a certain forum that he contacted everyone through or...?

B: Um, it was just an email. I think he got... I think he got the email through the ACCT or something. I don't know how he got the list.

M: Oh, I see. OK. So, do you, do you think that there's, perhaps, a little bit of leadership lacking... um, on this area?

B: Yes.

M: OK. Um, and, again, like we talked about on risk management, how important do you think it is for, for leadership on an industry-basis on risk, on collaboration?

B: Hmm... that's a good question.

[Laughter]

B: Um, I think it's some... I think it's somewhat important, but, um, because we're all using extremely safe gear and, um, I mean if you look at the incidences relatively to the volume of people going through, um, it seems that it's very, very safe, um, but I think the idea to maintain that safety record and not allow complacency and shoddy, um, workmanship and inspections to, to ruin that safety record, um, so...

M: Um, and do you think that, if the industry, you know, they may already do this, but do you think that collaborating with public agencies on risk management, do you think that's beneficial for the industry?

B: Uuh. You know... I think that the public agencies would love that, but, um...

[Laughter]

M: Yeah, but would you as an operator?

[Laughter]

B: I think that opens a whole can of worms, um, that, that I would not want to be the person that opens that, um, because I don't think, um, I think that as the industry matures that the states can adopt, the public bodies can adopt, "hey, you know, as long as your thing, you know, adheres to ACCT standards, you're, you're good", you know... I would think.

M: Yeah. Do you, do you think it could be a potential issue, for example, that, um, that there might be a lack of industry experience on the public, public agency side for example?

B: Um, in terms of lobbying?

M: No, I'm thinking, if they're working, um... let's say if they came out to inspect a course, an aerial adventure park, for example, you know, some people that I've spoken to said they came out, but they don't actually know what they're looking at, because they've never worked on these courses before.

B: Oh, right. Yeah. I mean, that's the case in the, in the county that I'm in is that the building department said, "We don't know how to inspect this". So, but, um, you know, "... but if you can get an engineer to say, you know, these connections are appropriate to the standard that you guys build at, give us that and give us the inspection report and you're good to go. Um, and you have to follow the operational rules and so on and so forth".

M: Yeah. I mean, do you think the industry is going to go down... like, a route of a, um, relationship with, or working with government. Do you think that's something that's likely to happen? Some states, obviously, are focussing on it now, aren't they?

B: I imagine that, um, the building departments will eventually have a category for this type of thing, but defining what this type of thing is... um, is not something government is good at, in terms of, or you can't always apply zipline standards to aerial adventure courses and aerial adventure courses are different in terms of how they're built relative to high ropes courses. High ropes courses use helmets, because there's stuff above your head that you're going to be near and in an aerial adventure course they're not built that way. You know, they're not built so that your head is below something that you're eventually going to be up near. I mean, they're purposely built for that. So, you know, then you get into the whole helmet-thing and so on. So, I think, it's not a one-size-fits-all thing, um, but I would imagine that, um, I think the more the public bodies can rely on the existing industry bodies for, um,

certification, that's going to be better, but I think, overtime, it's going to morph into, um, government oversight.

M: Do you think it would be more efficient on a state-by-state basis or federal basis or local, even, like you have it?

B: Well, I think, um... I think it would be, um, most efficient, um, federally, um, but, but in the United States, it's definitely a state's right. You know, the federal government is not going to get involved with it. It's going to be a state issue. Um, and I think, um, [intentionally left blank], just has no rules about it and so you just deal with the local municipality or a county, whatever, or both, if you're in a city and a county, you need to make sure they're both OK with it and so on.

M: I mean, if you have no rules in your state, does it concern you that somebody, I guess, could theoretically, just open a, um, a ropes course to whatever standard they fancied?

[Laughter]

B: Um, no. It doesn't bother me.

M: No.

B: I, I, I still think people would do it. I think there's enough, um... well, one, there's not a tremendous amount of trees here in, [intentionally left blank], so, um, but, so therefore, if you're going to put in towers, you're going to need engineers for that and the engineers are not going to sign off on it unless they know that the cables that are going between it are appropriate and built to some standard, so they're going to tell you to use PRCA or ACCT or whatever. Um, and then on trees, you know, um, I think anybody who has... well, banks don't loan money for people to build adventure courses, so someone's going to have, um, a good amount of money to want to do that and, um, if they have generally that much money sitting around, they're not going to risk it just building it to some... weird standard, they're going to look up, they're going to be smart enough to pick one of the standards that are out there and, and go through the process. And I think the government approvals are... they're going to have to get someone in the town or the county to approve it, because it's a commercial venture. You're not going to get your business license without someone saying it's OK to do and, and the people are not going to say it's OK to do until the building department says it's OK to do and the building department is not going to say it's OK to do, unless you can convince that the standard you're using or the engineers or whatever. So, I'm not too worried about rogue, um... zipline installers or anything.

M: So, even though there aren't any official regulations, as such, there are still some hurdles you have to jump through as such?

B: Yes. Yes. And, um, what I've seen, it's really a, really a fiscal... the fact that it's not like building a, a house on, on spec or building an office building and hoping someone's going to rent it. The bank's going to loan you the money for a house or a building, because they have collateral. But, banks are not going to give you any money to put boards and cables in a tree.

[Laughter]

B: So, um, so, someone has to have that chunk of money to do it and, um, that precludes a lot of people.

M: Right, [intentionally left blank], I have just two more questions and we're done.

B: OK. Alright.

M: Um, and it's basically just, I guess, looking ahead. Um, what do you think the future looks like for the aerial adventure industry?

B: Well, it seems to be growing. Um, it seems to me that, um, people like it and, um... I think that there is no shortage of creative new, um, connections between trees. Um, but I think as long as the operators are serious about, about safety and managing the risky nature of what it is we do, I don't see a downside to it. I think that people love that stuff.

M: Do you see any developments? Because, there's a lot of innovation going on at the moment. Do you see that continuing... or?

B: Um, I'm not too close to that. Um, I think that a lot of the developments have to do with more structural things. Um, I would imagine that it would be cool to see, um... more mechanical elements up in the adventure course where you're doing, where it's transferring you somehow or motorised stuff or solar... I don't know. I'm just thinking. You know, I've been in it... I've only been in it 5 years and, you know, pretty much a carabiner's been a carabiner and a lanyard's been a lanyard, so I don't... I, I mean, I see the adoption of smart belay, you know, for sure, um, coming along and, um, there's some cable technologies and some other things, but I think most... we've got to keep the costs down. It can't be... the course costs can't go up so drastically that the price for a guest to come gets too high, because then the guest won't come. It becomes too... they'll go to Disney Land then, you know. So, we have to be conscious of it.

M: Is that something you're concerned about?

B: Well, yeah. Yeah, I think that if the aerial adventure course becomes too technical and too expensive a family will just opt out and just go and do something else. You know, um, so I think it's shocking to me that, um, people can get 80, 90, a hundred dollars for a few ziplines. Um, and an aerial adventure course, which has, you know, 60, 70, 80, 100 different elements, really can only get 50, 60 dollars. I mean, but, but, again, it's not... America is more interested in, um, maybe to sit in a harness and have fun, versus working for the fun.

[Laughter]

M: I don't think that's just America.

[Laughter]

M: But, yeah, it's a good point you're making, that's a good point. Um, listen, [intentionally left blank], that's all I have, that's all I have. Um, thank you very much and I'm sorry it took a little bit longer than an hour.

B: Alright. That's OK.

M: Yeah, thank you very much for your help and your input today.

B: Alright, thanks a lot.

M: Alright. Do you have any questions before we finish or?

B: No, I'm good.

M: No worries, [intentionally left blank], you take care of yourself and I'll send this recording off to you as well.

B: OK.

M: Thank you again.

B: Alright, thanks a lot. Bye.

M: Bye.

Call ended

Participant 12 Conversation

B: Participant O: Receptionist M: Me

O: Hi, thank you for calling [intentionally left blank], this is [intentionally left blank].

M: Oh, hello, [intentionally left blank], is, um, [intentionally left blank] available at all please?

O: Um, I do think he is. Can I ask who's speaking?

M: It's, um, Marcus Hansen. I think he's expecting my call.

O: Alright, I will let him know and I'll go ahead and transfer you.

M: Thank you very much.

O: No problem. One moment.

B: Hello, this is [intentionally left blank].

M: Hey, [intentionally left blank], it's Marcus Hansen here.

B: Hello, how are you?

M: I'm good. How are you?

B: Pretty good.

M: Good. Good. Um, is this a good time?

B: Yes, this is.

M: Fantastic. Um, thank you very much for taking the time out of your schedule to do this.

B: Yeah, no worries. I'm glad to help.

M: No worries. Yeah, um, how did, um, ACCT go?

B: Oh, very good. Very good. A lot of learning. Um, and our park actually was honoured by ACCT with an award.

M: Oh, fantastic! Which one?

B: Yeah. The, um, Outstanding Events award. We do, um, weekly events every, throughout the whole, um, operational season, so...

M: Oh, fantastic. That's brilliant.

B: Yeah, thank you.

M: Um, so, um, so, yeah, [intentionally left blank], thank you again for participating. Um, before we start, I just wanted to go through a couple of, um, checks with you. Um, just a reminder, that I am recording the conversation. Um, but, um, what I'll do is, when I've transcribed the interview, um, I'll leave out any potential identifiers, um, like your name, um, though that's an actual identifier, um, and then, um, your, your state and so on and your company name. Um...

B: OK. No problem.

M: Um, and basically the layout of the interview is just going to go like, we'll start with some questions on risk manage, some general basic questions and then some questions on risk management and then some questions on collaboration and that's basically it.

B: OK.

M: OK. Um, so do you have any questions before we start?

B: Um, what, um, what's your major?

M: Um, well, the PhD is focussing, um, on, basically, um, how, um, stake, industry stakeholder collaboration can improve risk management in the aerial adventure industry. Um, so, yeah, that's basically it. Um, I don't think we have, um, an actual major, um, as such, like you do in America. Um, this will be a PhD in tourism, but with a focus on stakeholder collaboration, basically.

B: OK. Oh, excellent.

[Laughter]

M: Well, all being well. I've got to pass first, right?

B: Right. Right.

M: So, um, but anyway. So, um, yeah, let's do it. So, um, [intentionally left blank], please tell me about your role within the organisation.

B: OK. Well, the organisation itself, um, the mother corporation is, um, [intentionally left blank], based in [intentionally left blank] and, um, within the [intentionally left blank] there are individual sites mostly across the eastern US, but we do have two here in the state of

[intentionally left blank], um, [intentionally left blank] and [intentionally left blank]. Um, so I am the general manager and I manage both locations.

M: Oh, OK. OK. So, um, just out of curiosity, [intentionally left blank], is it like a franchise?

B: No. No, um, it's basically all corporate stake. They do have, um, some investors at some sites, but it's not a franchise.

M: OK. And, um, how long have you been involved in the aerial adventure industry?

B: Just since 2014. January, 2014 I was hired to, um, manage the [intentionally left blank] location and then by June of that year, um, I took on the role of general manager of both parks.

M: OK. What made you go into aerial adventure parks?

B: It sounded really interesting. It really did. I came from a long career in, um, municipal parks and recreation, working for, um, [intentionally left blank] largest special parks district, um, the [intentionally left blank], and, um, basically, took a golden hand-shake buy-out in 2013 with about 50 other employees and I was just... I had started in commercial recreation back in the early 1990s and I did that for a few years and I just thought it would, um, nice to get back into it.

M: Yeah, for sure, yeah. Wow, OK. So, um, I mean, in recreation, then, you've got, um, a number of years of experience, obviously. Um, now, in terms of the, um, the two parks you have, are they, um, commercial or is it educational purposes that you operate on?

B: Nope, it's, um, completely commercial, private. So, it is for-profit.

M: OK. And what do you believe is the key attraction to, um, aerial adventure parks?

B: I think the key attraction is that you, it's a very unique approach to outdoor recreation. We really, I, personally, really to lead with the eco-tourism aspect. Being out in nature, for one, and then two, leading an active lifestyle, and then, three, family fun, things that you can do as a family unit out in nature, enjoying, you know, basically, a fitness-style activity.

M: Yeah, for sure. Um, do you find that it's mainly families you get?

B: It's a good mix. I mean, there are things that we target specifically for families. I mentioned that we have an extensive event schedule and, um, sometimes we, we really key on family interests and other times we key on interests of individuals or, you know, couples. We do some events that try draw couples in for, for date night and what not.

M: Oh, that's cool.

B: So, it's a pretty even mix on who we target, even corporate groups we target.

M: OK. Do you do, do you offer team building as well or?

B: Not formally. We don't have a formal team builder position. Um, we've dabbled in it, but it's really, kind of, a speciality that we may pursue in the future. But, um, our system is really self-guided. Once you're trained and practiced, you really, kind of, navigate all of our aerial trails on your own or in a small group. So, we don't have, like, what you would have on a canopy tour, um, where the tour-guide walks the group around. It's really, um, you're self-navigating for the most part and our staff, um, patrol the forest floor, giving advice and coaching and, um, then doing physical assists when needed to assist people that are in the trees..

M: Oh, OK. Yeah, I get you. Um, so, now, some people say that, um, one of the attractions to these parks is the thrill-seeking, this sense that, um, you're taking a risk, although some would say this is a perceived risk, so what role do you think that this, um, risk-taking, or thrill-seeking, plays in the overall attraction to the aerial adventure parks?

B: I think for a good 20 years now, people have really tried to expand commercially into the, um, the adrenaline-junkie mentality. So, there are businesses out there that, I mean, that really, kind of, dwell on that aspect. If you just look at, even bungee jumping, I mean, that's, that's basically what that is all set up for: people that want that adrenaline thrill. It's included in what we offer, but it's, it's mixed with other parts of it. We have, um, aerial challenge trails. So, we have, um, individual trails that are suspended between trees in the forest and some trails are designed for 5 and 6 year-olds, where other trails are designed for, you know, the older teens and, and all levels of adulthood. So, um, there's a certain level of risk and worry that goes into it, and that's what makes it exciting and that's what gets your adrenaline pumping, but, um, that's not really the only thing that we push. Um, some people, some people even admit that they're cowards and use our activity and our park as a way to overcome their fears and to build confidence by going through our aerial challenges.

M: Oh, OK. Alright. So, um, you take little kids on your course as well, did you say?

B: Yeah, we'll accept them as young as 5 or 6 years old and they're with a paid adult climber.

M: Oh, fantastic.

B: Right. So, our system works, it's a timed ticket, it's a three hour climbing ticket, when you go in and you've paid for your admission, after your training, you get three hours to, basically, climb as much as you want. We have 10 individual trails and, um, there are age-restrictions on, on the different trails. So, 5 and 6 year-olds can really only climb 2 trails, but that's really all they're capable of doing.

M: Yeah.

B: Um, um, but, again, if you're 14 or older, you basically, have carte blanche to climb any trail you want.

M: And, and do the little ones still get the zipline at the end?

B: Yeah. Every, every one of our aerial trails have at least one zipline on it. Yes. They're not, um, very long ziplines. You know, I think, I don't even think we have one here that's over 200ft. So, um, you have to climb through tree obstacles. So, essentially, elements are obstacles that are suspended on rope and suspended on, um, steel cable, and that's strung through the trees, so you have to get from one tree to the next tree by climbing through that element on the trail. So, it could be a bridge, it could be a, um, a swing that's hung on a zipline trolley, it could be a cargo net, it could be a set of, um, you know, them big-style rings that gymnastics use, that you have to, basically, traverse your way through from one tree to another.

[Laughter]

M: Right. It's certainly, certainly a little bit of exercise as well, isn't it?

B: It is. Yes, it is. We have a, um, we have a weight limit and the weight limit imposed, one, because it's, it's you're not going to be able to lift yourself if you're heavy and this is, this is an exercise activity, and, and, two, we have to have the ability to rescue or assist you if you're stuck, so people that are over the weight thresholds, even our staff would have a hard time assisting them and, and switching their safety system on to a secondary safety system, so they can be lowered to the ground.

M: What is the threshold? Is it 250lbs?

B: It's 265lbs.

M: 265. OK. Just out of curiosity, [intentionally left blank].

B: Yeah.

M: So, um, moving on to, um, risk management, then, um, how would you define risk?

B: Well, I mean, risk when I go back to my college days, risk is defined as, really, anything that does not have, um, predictability or probable outcome, but, um, beyond that, in our industry, it's perceived risk. Although, people are certainly safe, I mean, they're not going to fall. They're hooked into, they're hooked into a safety system that they cannot physically detach from, but it's that perceived risk that makes it exciting and that's the selling point for us. So, risk itself, is any activity, or probability that has an, um, an uncertain outcome.

M: Um, and, um, what belay system do you use? Did you say you can't detach from it?

B: Right. Our safety clips is, um, the, the SSB from Bornak.

M: Oh, OK.

B: So, once you clip in, you cannot detach, unless we detach you or you reach the end of the trail, where there's a key.

M: OK. Oh, I see. OK. So, what do you think are the key challenges, then, you face in risk management?

B: I think that in commercial recreation and in, um, tourism, are the fields that we really, kind of, dabble in, the challenges are just making sure that people understand that it is safe and, although, you might not know what the achievable outcomes are, we, as park professionals, certainly do. So, um, that's a story-line that we need to manage. And, um, and that's a big part of our selling-point. It is uncertain, you still have that perceived risk that you could fall.

M: Right, and, um, you said, as well, that you do some training as well, um, with participants before they enter the course?

B: Yeah, we do. We do about a 40 minute, 40 minute harnessing and training session and let them practice. So, we do talk all through that practice and training about how you are safe at all times, um, you're not going to fall to the ground. It's not that it's going to catch you, you're already attached to it.

M: Right, OK. Um, so, what, what role do you think that the human factor plays in, in risk management? Because, obviously, you're dealing with your customers and your staff as well, I guess.

B: Yeah, I mean, the human factor, you know, it can more than quintuple the, the danger. Any time you have humans involved in a, in a program or in a system, I mean, there's always a risk that something could go wrong. Um, if it's, if it's not a mechanical [inaudible], a mechanical system, which ours is a mechanical system, but you still have to rely on humans to make sure that you transfer on to the courses, um, effectively. You still worry about that and so, to overcome that risk, we make sure that all of our rescue and park employees go through a 40-hour training and certification program that proves that, one, they can do it and they have the confidence, and, two, you know, that they've actually certified and tested that they are capable.

M: Oh, cool. And, um, is that, that certification, is that an internal one or is it an external certification?

B: Um, well, it's not a park certification. We use the, um, Aerial Adventure Academy certification program. So, we have sent a certain number of our employees to be trained in this and certified as trainers through this and it is a safety program and certificates are valid through the ACCT. So, the Aerial Adventure Academy certifies trainers and instructors in ACCT standards.

M: Oh, fantastic. Is that something the ACCT offers?

B: No, they said that they write the standards and then there are several academies out there, or training services, that will train your trainers. So, we sent an employee in January to go, to go get his first certification as a trainer.

M: Oh, wow. I can't, I can't believe this is the first I have heard about that program.

B: Right.

M: Thank you, that's brilliant. Um, so, what, what, um, how do you think that innovation has affected, um, risk management, I guess, in your time at the company?

B: Innovation?

M: Innovation, yeah.

B: Yeah, like technical innovation or...?

M: Yeah, um...

B: Be more specific. Like, um, safety equipment innovation or innovations in the way that we operate and, um, market ourselves.

M: So, I would, um, I was thinking, like, your safety equipment and so, because I know that's changed a lot over the last few years.

B: And it does constantly change. Um, it changes in ways that can, um, simplify the job of our park monitors, that's the people that physically assist climbers in the way, um, and the changes in the way that the equipment is refined. Even Bornak itself has, um, not done a full redesign of the SSB, but they did make some, some changes that affect the way that they normally operate. So, I think changes are put in effect to minimize risk or to reduce risk.

M: Mm. Do you find that companies, like Bornak, listen to you, um, as an operator, um, really well?

B: Well, not me particular, because we purchase our equipment through a distributor and that distributor communicates our problems with Bornak. So, does that message, um, travel through the line of communication and get to Bornak? I would hope it does. But, I'm not on Bornak's website submitting suggestions. Um, we just, we tell our distributor what our problems and they, they get the messages to Bornak. And, um, Bornak is not the only equipment we use. That, that just happens to be the, um, safety clips, the belay clips that we use, but we use equipment from other, um, other belay suppliers in the United States, and some out of the United States.

M: OK. OK. Yeah, I mean, from what I can gather, there are so many suppliers in the industry. When I was there, I used to work in the industry myself, but, um, I mean, there were still a few, but now it's like, and it's international now as well, from all over the world.

B: Yeah, worldwide. It is... well, I know in the US it's the, the fastest growing outdoor, um, recreation industry.

M: Right, yeah. And that's why I'm interested in the studying the industry, because it is, indeed, growing really fast, which is, um, really cool. Um, but, so, um, what types of risks do you face as an organisation?

B: I think, um, I really don't, I mean, obviously the safety risk is always there, it's always there and that's why we have so many levels of safety training and documentation. The other risk is that to make sure that the customers are informed of the risk. Um, so we do our best to explain to them in their, in their harnessing and training, what the risks are and that, that we have you covered, but it takes the climber's cooperation to use the system as it was designed. I mean, we can't, you can't really see everything from the ground, um, but

just to make sure that they have information and that they practice the techniques before they climb.

M: Right, OK. Um, so bearing that in mind, what does effective risk management look like to you, then?

B: Could you just elaborate on that for me, on what you're really talking about?

M: Yeah, sure. So, are you, when you think about risk management, do you think about, kind of, all risks, um, together, or do you approach them separately? Do you have this all-encompassing view towards it, or?

B: No, I think it's, um, first of all, for effective risk management to happen, I mean, it has to be an ongoing campaign that's constantly monitored, but I don't think it's one, one massive program. I mean, there are, there are risks that you manage in the air and then there's risks that we manage on the ground as well. I mean, people do walk through the park, on our groomed paths, but you're always looking out for what risks may lie there that people might not see and we do operate at night as well, so that changes things altogether.

M: Oh, wow.

B: Yeah, we light, we light things up, not with floodlights, but with LED lights, so, it's just enough light so that people can climb without problems in the trees, and then the lights casts back down to the ground, so it's the same lighting system that we use to light the footpaths. Um, so, it's, it's... safety rules on the ground are not the same safety rules and, um, it's not the same safety program that we have in the trees.

M: Do you think that, um, are they still connected, though, at the end of the day? I mean, the...

B: They're connected, because they both pour into the customer experience.

M: Mm. OK.

B: And, some of the, some of the safety protocols that we have, and park rules, are put in place, because that's what the AC, ACCT standards are, and others are just the common sense practices that we realise, because all of these adventure parks operate much differently, much differently. Even, you know, even competitor parks operate much differently. We have, um, we have an experience where it's open to customers and non-climbers to walk around interact with their friends that are climbing, and so, to create that atmosphere we have to take on additional risks to make sure our grounds are safe.

M: Is that quite different from other parks then? Other parks don't allow that, or?

B: Well, I mean, if you're in a canopy tour situation there may be no one underneath you at all. You can, you can travel for half a mile going from tree-to-tree and it's not an experience designed to interact with other people. Ours is. Ours is. And, um, we had, um, 57,000 climbers just at the, um, [intentionally left blank] location last year.

M: 57?

B: Yeah. And in my estimation you can add another 10,000 people who didn't even get a harness on and climb and we don't charge anyone that walks through the park either, so that's part of our marketing campaign is just to set that interactive experience and you don't have to be a climber to participate.

M: Um, just out of curiosity, what's your season like? How long is it?

B: Um, April 20th through November 15th, in that range.

M: Wow, that's a short time to get that many people through!

[Laughter]

B: It's very intense. Very intense. There's a lot of employees here and there's a lot of safety standards.

M: For sure. Um, so, um, and you just said, um, you just briefly mentioned your protocols in place, um, can you describe your procedures in place, in terms of, um, assessing risks and so on?

B: Well, I mean, there are standards on how the courses are built and, I don't know if you're familiar with playground inspections, but, um, the National Recreation and Parks Association, in the US, has standards, um, for play apparatus. Now, we don't follow those standards, because we have suspended systems that are in the air, but all of these national organisations try to set standards for safety and for, um, for standards for the build specifications on equipment. So, if you're on a playground in, in [intentionally left blank], or anywhere in the US, if you follow the NRPA standards, I mean, there are pinch-point standards, there are surface standards, there are fastener standards and all the standards have been established to minimise risk of, of injury to the participant and it's the same thing in the adventure park industry. There are standards on how things are built, there are standards on life-lines, there are standards on equipment. Um, there is even standards for, um, distances between reach-points on certain climbing elements and how the distances

that, that, that, for instance, um, you know, climbing rings can be spaced apart, or hand-holds can be spaced apart, if you're dealing with, um, you know, rock climbing hand-holds that might be ratchet into trees. So, there are, there are build specifications as standards and then safety standards as well, as far as, you know, we do an inspection every single morning, before the park is open. So, we have our staff go through all the trails and inspect everything on that trail. So, they inspect for, um, you know, broken individual wires and the braided wire rope and they, they're putting their hands in every single nut that's used as a, as a fastener on the elements and they're inspecting every cable and they're inspecting every Tweezle Lock that is used with the SSB system. They're looking at the wood, they're looking at the integrity of the bumper pads and the ziplines and the landing ramps. So, there's a lot that goes into this and a lot of training that goes through on our parks to make sure that the staff know what to look for, know, um, the red flags that we're looking for.

M: Oh, for sure. Yeah. OK.

B: And then we have standards that are imposed on the guests as well. I mean, how many people can be on the platform at one time, how many people can be on an element at one time, how you use the different elements. There are certain conduct rules for our participants at the park that we have to manage to make sure that we're minimising the risk.

M: OK. Um, do, do you, um... that must be interesting, especially with the, um participants, because, you know, once the adrenaline gets going, um, I mean, I've been up there myself, sometimes you forget, um, what you're not supposed to do, like how many people on a platform.

[Laughter]

B: Right. Or, or, not to put your hand in front of a zipline trolley, while you're zipping.

M: Um, yeah. Yeah.

[Laughter]

B: I mean those things are... when, when the adrenaline is flowing, some things, and it's not the customer's fault, and they were trained on how to use it correctly, but, um, adrenaline, um, unfortunately, sometimes can make you forgetful.

M: Yeah, for sure. Um, that's true. I mean, I've got a fear of heights, that's how I got into this myself, in the first place, um, on the courses and so on, and, um, yeah, once you get up there...

[Laughter]

B: Yeah, you're not thinking about so many things other than your safety.

M: Yeah, exactly. Very, true. Um, so, um, what role or impact would you say that risk management has on the overall strategy of the organisation?

B: It is, I think, it's the overall goal to provide an, an exciting experience that is safe. I mean, so it's in the first key phase of, of your strategy, it's got to be a safe experience. And the risk that is really there is implied risk.

M: Right. Yeah. Would you say that, um, I mean, how does risk relate to your...

B: Can I, but, but, but, um, let me, let me step back a minute. You know, we do not use that phrase, this, that the activity is safe. We use the phrase that it's as safe as we can make it and I catch myself all the time in saying it's safe and even the, you know, the employees that we have, we really try to tell them, "don't, don't use the phrase that this is safe", because, you know, there's, there's risk in anything, you know, there's risk in anything. So, this is a system, an activity that is as safe as we can make it. It's the safe, it's the safest equipment that money can buy, I'll tell you that, and that's, that's something that we say quite often.

M: Oh, OK. Yeah. When you do the training and so on, yeah?

B: Yeah.

M: Yeah, I mean, I guess, like you said earlier, at the end of the day, um, then it's safe, but once you start playing around...

B: If you follow... no, if you follow the rules, you minimize the risk.

M: Right, OK. I get you. I get you.

B: And that could be real risk or implied risk. Either one.

M: Um, how would you say that it relates to the overall culture, then, within the organisation?

B: Within my organisation?

M: Um, yeah.

B: Or within the industry?

M: Where you work, yeah, within your organisation. So, I'm thinking about your staff and so on.

B: Well, and again, although we are individual locations that are independently operated, I mean, the, the [intentionally left blank] of [intentionally left blank], we all are trained and adhere, comply to the same safety systems. So, if I were to go to [intentionally left blank] tomorrow and climb through their park, their safety systems are the same systems that we use, so there are some, there are standardised systems and all of our rules, that's in policy, they're standardised across all of our parks.

M: OK. Yeah, OK. I see, OK. Yeah. So, it's, um, the parent company, they use, almost, like a cookie-cutter approach with the parks?

B: Well, with the safety systems, yes. Yes. With the operational model: no. No. Every park operates within a different demographic and every park has a different marketing strategy based on the region that they're in.

M: Wow. OK. That's interesting.

B: So, um, the safety systems need to be cookie-cutter, because the system itself is endorsed by the ACCT and that's why it needs to be cookie-cutter standard and all of the different adventure parks adhere to the standard, because, that's the norm. That's the generally accepted standard and that's what's endorsed through the challenge industry. So, we all stick to it.

M: OK. And, so, so how do you, um, as management, how do you monitor that the risk management procedures are being followed throughout the parks?

B: I mean, the managers and the supervisors are constantly on the watch, um, to make sure that the employees are, are following the, um, the tenets of their certification and then making sure that they're staying on task and that, that they're doing their job the way that they were trained. Um, the other things that we do is any time that we really come into contact with a customer and, um, assist them, we don't like to use the term 'rescue', we assist them', so we can verbally assist them or we can physically assist them. Whenever there's a physical assists, the practice is to fill out an 'assist card', which gathers information about the climber, not personal information, that gathers information about,

about the climber and, um, the challenge that they faced to get into that predicament and then we document the, the methods and location of where it occurred. So, what sort of assist did we do? And, um... so, then we can go back and look to see, "well, these two elements seem to be creating a lot of problems, or, or challenge that's great enough to cause us to do a lot of assists". So, then we go back and we can analyse those elements to say, "What's not right here? What's really the hang up? Why can't people get through it?" or "why are people constantly doing it incorrectly?". Sometimes people stray from the way that they were trained and the way that we taught them to practice it on the ground and once, as you said a few minutes ago, once the adrenaline kicks in, people, naturally, kind of, abandon things and, and go into a self-survival mode. Um, so, we analyse those problems. Say, "What can we do to streamline this, yet still stay within the standards set in the industry?", or, or how the elements are built or how the ladders are built, so they're within the standard and are safe. Ultimately, these, these areas that are, not so much problems, but gain our attention, we want to streamline them so there's, one, no bottlenecks on the trail, because sometimes that happens on some things that're very difficult. We want to get people, we want it to be, those transition points, to be intuitive, so people can figure it out. We can't be everywhere at the park at the same time, that's why we call it a self-guided system.

M: Yeah. You want it to be challenging, yet at the same time achievable, right?

B: Right. We, we want people to have their struggles on the elements, these suspended elements, how they get through them. We really don't want the challenges to occur on the platforms or on the ladders, where you need to get from one platform or one system to the next. So, um, those are the areas that we really look at, because those seem to be the pinch-points that really slow people down.

M: OK. That's interesting. So, on the platforms, rather than the actual challenges.

B: Right. We have, um, I think it's 100 and, over 130 platforms at this location. So, the platform is attached to the tree and then, you know, the customers on the trail will wait on the trail until it's their turn. Some platforms are not linear, some platforms are stacked vertically, so you have to, you have to navigate a ladder to get to the next platform.

[Laughter]

M: Oh, wow.

B: Yeah, that's, that's sometimes not only a great challenge, but that's, that's a choke point, because it takes much longer to walk up, you know, a caving ladder, than it does, um, to [inaudible] and walk across a wire sometimes.

M: Yeah, for sure. Yeah. Um, oh, that's interesting. I haven't tried that kind of challenge before.

B: Yeah, sometimes you have to climb up a tree, in the middle of a course, in the middle of a trail, to, to get to the next platform.

M: Wow. Yeah, that's when you start looking down, yeah.

[Laughter]

B: Right.

M: Um, but so how do you, um, I mean, you've just talked about some of the communication that exists you and your staff, um, but what, what, I mean, again, going a bit further into that, what kinds of lines of communication do exist? Do you have meetings as well, or?

B: We try to do, you know, routine staff trainings, um, through, throughout the operational season, so we have, most of the meetings are with the, the management and supervisors and then the messages are carried down. We do some, um, trainings throughout the summer. We do some, um, we hold some mandatory meetings that are, we cover safety topics and topics for customer service and then we convert the rest of the meeting into something fun and team building.

M: Oh, that's good. OK. Um, and how do you encourage your staff share the information and knowledge that they gain from being, obviously, the front-line staff?

B: Um, well, we have open-door policies, that they can come and talk to the actual management that work at the park. But, um, most of the communication goes from the, um, you know, the line employee, to a supervisor, to a manager. But, um, it's an open-door policy.

M: Mm. And how important do you think that this information, that your front-line staff possess, how important do you think that is?

B: Well, I think it's critical. I mean, they're the ones that are making all the key observations, because they see where customers might be struggling or where customers

may be forgetful of the procedures that they were trained on and so getting that information is critical.

M: Um, and so, leading on from that, I guess, what role do you think leadership plays in effective risk management?

B: I think leadership's important, because, um, you set that tone with leadership and, um, what the expectations are and, um, it shows your adherence, as an organisation, to a standard... and you've got your supervisors, that are, you know, they're, they're leaders as well, imposing these standards and, and supervising how the line-staff actually apply the standards and interpret them. That's critical.

M: Now, the state that you operate in, um, how does the state, um, and other stakeholders like insurance, how do they influence risk management procedures, um, at your parks?

B: Well, that, well, that question might be a little over my head, because, um, I don't really need to worry about any of that, that's all, kind of, taken care of through the insurance, or through corporate. Um, but, the way we can guarantee, um, not guarantee, but to minimise the, um, the insurance in the US is based on, on the risk that your activity imposes, you know, if you're going to get insurance for a mud-run, well, that insurance is different, um, than if you're going on a mud-run that includes swimming or a triathlon. Um, it's based on, you know, the credentials of your business and the, um, the risk and accident record that, that your business has. Um, the way the way that we minimise that is to stick to the industry standards and, um, and the other thing that, that helps us reduce our risk with insurance agencies is making sure that we're documenting all the problems that we're experiencing and all of the maintenance issues and how they were corrected.

M: Mhm. And does the state regulate the industry?

B: No, the state does not regulate the industry, but the state, the state of [intentionally left blank] is starting to gain a foot-hold in it. There was just news the other week that the state of [intentionally left blank] is now going to require, um, zipline facilities to be inspected and accredited under the, um, carnival and amusement ride act.

M: Oh, wow. OK.

B: So, we may be going through some changes very quickly, even before the park opens for the summer.

M: Right. Yeah. OK, that's interesting. It seems to me that it's only about 15 or 16 states at the moment that actually regulate it, but that quite a few are considering it.

B: Well, and I think it's a good thing too, because there have been some very unfortunate incidents in the last 3 or 4 years, that, I think that, because there's a lack of a standard across a lot of these parks and some parks really aren't even challenge-oriented, it's just pure ziplines. You know, people are there for an amusement ride, um... I'm hoping that we won't be lumped in with that, because this really isn't an amusement ride, it's more of an independent sport, but, um, we'll see.

M: Yeah, that's what I'm hearing a lot, you know, that operators are saying that, you know, this is not an amusement ride, um, because of the physical level, aspect to it, um, rather than a rollercoaster, where you just sit and enjoy it, kind of thing.

B: Right. The participants have to use their skills and their training to get that experience and, and to go through an experience as it was intended and an amusement ride is, basically, you're, as far as a zipline, is basically, you're strapped in and you can't detach and you go on a ride, whereas our ziplines really exceed more than 200ft.

M: Right. Yeah. And so, um, and you just mentioned a few incidents, um, in the industry. So, how do you think that an incident at one park, how, then, how does that affect the rest of the industry?

B: I think there's a lot of openness. I mean, we, we're not communicative... if one competitor has an incident, they really don't pick up the phone and speak with all of their competitors, but when you hear about things you begin to investigate and you try to learn on the exposed outcomes from, um, the published incident. So, um, you try to learn from that.

M: Yeah. So, how do you get the information then?

B: Well, we certainly don't get it from the competitors. A lot of times we'll get briefs from, um, we use a certified inspection service, and, um, they're certified nation-wide, so, sometimes, when there's an incident they'll actually call our inspection service and have them go out and do a full inspection after the incident. And, the inspector is, um, able to, because he represents the industry, he is able to publish some of the details, what the problems were, mechanically, mechanical problems on certain, um, parks or trails. So, we can learn from that, but we definitely don't get the information from the competitors themselves.

M: Right. Is that something you'd like to see? Um, more, um, collaboration like that with competitors on risk management?

B: Well, I think that's why we have the ACCT. The organisation itself is supposed to be the voice of all of us, so that's where a lot of the learning is done and that's where and that's how the standards are changed, um, because, their changed through the organisation itself. So, a lot of learning happens right from what the industry, um, publishes on an event.

M: OK. So, um, do you, do you, I mean, I know you're a part of larger organisation, but do you collaborate with other organisations in the industry?

B: I, we don't here in [intentionally left blank], um, but there are, I know, one of the parks in [intentionally left blank], one of our sister parks in [intentionally left blank] has had a decline in attendance, because the world's largest indoor climbing park opened a half hour away from them, so they had a drastic drop and their attendance really didn't have any improvement over the last year and they attribute a lot of it to, to the, this new facility, so, in just brain-storming at the conference, I mentioned that, "hey, it would be worth it if you sent some employees out there to climb it and if you, as the park manager, went and just met with them to see, explore what the opportunities are to collaborate".

M: Yeah, for sure. Oh, wow, OK. What did they say to that?

B: Um, they were, kind of, taken aback to it.

[Laughter]

B: But, if I was in that situation, what do you have to lose, because they're definitely stealing your business.

M: Yeah, for sure, yeah. I mean, but, and, also, I think it's probably only healthy to see what other people are doing, right?

B: And have relationships with them.

M: Yeah, for sure. Um, so can you describe any levels of collaboration in the industry?

B: Well, I, I think... I think, especially as far as the ACCT goes, that's why we have this conference, so people can collaborate on their challenges and achievements. Um, that's one area that it occurs, but, um, it's tough, because you always perceive that this is a competitor that could either steal your ideas or, or metabolise your operations into their operational plan and then, um, either build at a faster pace or make greater successes than

you have. So, um, there's a risk there, there's a risk there. Um, we're not known for really collaborating with direct competitors, although there are many builders and park-sites across the US that we find no competition with, even other, even other park builders. There's a builder, this week that is up at our [intentionally left blank] location doing, um, a general inspection and it's not the builder that was used to actually build the park. It's an alliance that the corporation has with the competing builder and they basically work together and share information.

M: Oh, OK. Yeah, I was going to ask if it was something you encourage yourselves or how that worked out, that you had a, another builder come in and look at your park?

B: Um, yeah it's happened. It's happened. There are, there are some competing build companies that our corporate offices certainly don't mind collaborating with. Sometimes they will send people that are interested in having a park built, um, out for a tour and complimentary tickets and we always make sure that we treat them well and give them a great tour of the park, because it really serve, it really serve, they pose no risk. If you're operating in a different state, they're really not going to throw our business away from us. There is a park opening within a half hour of our location and they've been building that for over two years.

M: Oh, wow! Why did it take that long?

B: Um, because it's a municipal operation and that's notoriously long and it's a competing operator that is going to operate that venue, um, so we have not collaborated yet, although you can bet I'll have employees climbing up there this spring.

M: I was going to say, yeah, will you be going down there, yeah.

[Laughter]

B: It's a, it's a much smaller operation, it really is, so... but we've sent employees across the state to, to, um, experience competing operations in the past.

M: Yeah. How many parks are there in [intentionally left blank]? Do you know?

B: I couldn't tell you, no, because some of them are operated as zipline parks, some of them, some of them feature just a few obstacles, but mostly ziplines, some of them are static climbing, so it's basically mazes that are built on poles, you have to climb from pole-to-pole, through elements and those sort of things are only designed for very specific participants.

M: OK. So, um, what would you say are the benefits of collaboration? Um, specifically on risk management issues.

B: Um, I think that would be a more strict question, as far as, do, you know, what are the challenges or incidents that you've experienced, then maybe you might be interested in collaborating with competitors to explain to them the risk, you know, the information around incident that may have occurred that, that would not only benefit the, not just them, but the industry as a whole.

M: Yeah. Do you think it makes, um, I guess, the... does it improve the activity to, to share information between each other, even though you're competitors.

B: As, I think, as, um, a niche, yes. It does. We have no ill will towards any of our competitors as far as the safety of their systems and we'd like the experience of their guests to be secure, um, but the underlying thought is that we would like the guest to find a much better and greater experience at our facility. So, the worry about collaborating does prevent true collaborating. You're worried, you know, that that's why so much of our system that we have is actually intellectual property of our corporate founder.

M: OK?

B: So, you know, I mean, a lot of the elements and obstacles that are components of our park systems were developed by the corporate founder. I don't know that he has patents on things, but it is his intellectual property.

M: Oh, wow. OK. So, would you say that your parks are quite different, um, from the other parks? From your competitors.

B: Well, all the competitors, yes. This is, this is a much different experience and we consider ourselves the very best at what we do and that this is the best experience that money can buy in the challenge course industry.

M: OK, yeah. No, I'm just asking, because another person I spoke said, "well, there's only so many ways you can build a zipline", um...

B: Well, that's where your events come in.

M: Oh, right, OK. Yeah.

B: You dress things up with events so it gives people a reason to read more about your facility and give them a reason to want to come back to your park.

M: OK. So, um, marketing is a big thing for you?

B: Huge. It's huge. That's a lot of what I do.

M: OK. So, again, um, it's nothing to do with my study, but what kind of events do you run?

B: Some of them are major events, where we transform the, the park and some of them are just light-hearted events, like the Mother's Day event where we're just offering a discount and we may play some music and give kids a chance to plant flowers in a pot and give it to their mother.

M: Oh, lovely.

B: Other events we, you know, we encourage people to come dressed as their favourite superheroes and climb the trees. And, we have actually a park mascot that dresses as one of our own superheroes and that mascot will climb with the kids.

M: Oh, that's so cool!

B: We do some events that are very easy and nothing more than a gesture, like on national sunglasses day, um, national sunglasses day, we gave away 200 pairs of, um, very cheap sunglasses.

[Laughter]

B: Um, but it's those sort of events that give you something to write about every single week to put out in the newsletters and on Facebook.

M: Oh, wow. So, for you, it's a lot about connecting with the customer, really.

B: Right. And then we do major, major events. Um, we do glow nights and that is a major event at some expense, where there's a lot of technical equipment that's brought in and, um, lighting that's put in and, and, um, music and then we give away a lot of items to the guests so they can actually wear glow attire and LED, flashing LED attire in the trees, while they climb, um, and glow paints, face paints and then the, we buy costumes for the staff, every employee has a theme...

[Laughter]

B: [...] whether it's a... so, our theme this year is, we're doing a lumberjack glow, we're doing a pyjama party glow, we're doing an under-the-sea glow and then we're doing a zombie apocalypse glow.

M: Oh, flipping heck! I can see why you won this award now.

[Laughter]

B: Right. Yeah.

M: Wow.

B: We spend a lot of money on the events, but, um, we also reap the greatest rewards.

M: Yeah, um, I've never heard of that many events, um, being organised at, um, you know, one park. That's, yeah, that's really cool. Um...

B: 31 last year.

M: [...] do you do Halloween as well?

B: Yeah, we do a month-long Halloween event. It's called The Haunted Forest and, and it runs, um, it runs on lands next to the park and we bring in, um, there's an entire crew of people that we employ to do this. We have 16 paid actors and 3 or 4 support staff that just pull that event off and runs in the evenings from October and then we pair it. Um, you have the opportunity to buy climbing tickets, so you can climb first and then go through the haunted trail.

M: Oh, wow. That's so cool. But, um, and so, there's no haunting, as such, up on the courses themselves? That takes place on the ground.

B: No, no. That'd be pretty difficult to pull off and have actors up in the trees for three hours. We use outside actors, so they're basically theatre students and people that are in the amateur acting field that come out and we just pay them cash every night. So, it'd be difficult to execute something like that in the trees.

[Laughter]

B: And, this is something where it's more of a controlled atmosphere. I think, for the first few years, we had kids that actually trick or treated on us and so we had candy at every station and it ended with a very big pumpkin hunt and so everyone left with a nice big pumpkin.

M: That's lovely, that is.

B: Then they walk through the park afterwards, and see it all lit up and they see it, "wow". They came here to do the haunt and now they realise, "now, I want to climb".

M: Yeah, for sure. Again, another marketing ploy, yeah. That's brilliant.

B: Oh yeah.

M: Um, so, um, going back to collaboration again, sorry, um, we were talking about, it sounded a bit as though there was, perhaps, a lack of, a little bit of a lack of trust towards, um, between competitors. Um, so what do you believe is required for collaboration to work?

B: That's a really difficult question, because I don't even think, as far as our safety systems and the problems that we, um, may encounter I don't even think our corporate offices would really want us collaborating with our local competitors to, to share with us, with them information on what our problems are. We rely on those collaborations to come through corporate. Um, I think there is collaboration as long as your competitors are a part of the ACCT.

M: Yeah.

B: Because, then the ACCT is the voice for all of, all of the official members and they can share the information.

M: So, um, yeah, like you said, the ACCT is basically the voice for, um, all the individual members and then spread that out to the rest of the industry.

B: Right. Correct, yes.

M: Um, now, do you, yourself, do you communicate with the ACCT or is that through corporate as well?

B: That's corporate. Our corporate founder is now on the, on the general board of the ACCT, so...

M: Oh, that's brilliant. Congratulations.

B: Yeah, he was just elected, um, just before the conference began.

M: Right. Brilliant. Um, so, in terms of the conferences and the work that the ACCT does, um, with regards to collaboration, um, do you think that, um, given the fact that a lot of the stakeholders within the industry are small-to-medium enterprises, um, how do you think that might impact collaboration, um, within the industry?

B: Well, I think things are really, really changing, um, especially with the recent incidents, and even deaths at some zipline parks and challenge parks, across the United States is forcing the competitors is forcing to, to look toward to the organisation to collaborate.

M: Mm. Yeah. And do you, is there a case of, um, I mean, the ACCT conference is once a year, right?

B: Yes.

M: Do, do you think that, is that a hindrance sometimes, do you think, for some operators, that might not be able to, you know, because it changes location every year and some might not be able to attend because it's too far away and so on.

B: And it's very expensive. I think we sent, I think we sent about 30 people this year.

M: 30?! Wow.

B: Yeah. That... I might be over shooting. We took a group picture. I'd have to count all the bodies in the group picture.

[Laughter]

B: But, yeah, we sent 3 to 4 people from each location, plus the corporate offices.

M: OK. Wow, that's a lot. Because, I mean, one of the things that I'm hearing is that, um, some operators, um, or builders can only afford to send one person, um...

B: If, if even one.

M: Right.

B: If you look at it, there's a lot of private parks that are operated in, in, um, religious church camps that, you know, they basically only serve their membership, so, often times those small, um, operations probably don't participate at all.

M: Yeah. Is that, um, is that an issue for the industry, do you think? That, um...

B: Yeah, because I think that most of the accidents really happen at these smaller operations.

M: So, how can, how can these smaller parks, or other stakeholders, how can they be motivated to participate, do you think? I mean, I realise that, obviously, if they don't have the money, are there other ways that we can get them to the table, do you think?

B: You'd have to find a way to do it less expensively. I mean, these conferences are held at resorts, almost, and you'd have to find a way that they can telecommute to this thing.

M: Yeah, OK. Do you think something like virtual conferences would be beneficial?

B: Yeah. Yeah. I think that's a great idea. I don't know if you'd have a lot of adopters right away. It's hard enough to sit in a chair at a session for an hour and a half, um, let alone sitting at a computer for 8 hours a day watching this.

M: Right, yeah. How about some regional conferences? Or do you think that would take something away from the annual conference?

B: I don't think the industry is big enough for that right now.

M: OK.

B: I was a member of the Resort and Commercial Recreation Association for three years and my boss, at the time, was actually chair for the [intentionally left blank] district, so, I had to work for months to prepare our regional conference and then a month later, go to the national conference.

M: Oh, wow.

B: So, you, you, it's a lot of work for the people that are involved, and we're also members, at our location, of the [intentionally left blank] Parks and Recreation Association and it's very difficult to get to that conference, because it happens at the same time that the ACCT conference goes on. So, they have regional divisions as well and it's difficult, for people that work in recreational at all, have a busy season, so it's very difficult to find time to participate, commit yourself to something like that during your busy season.

M: Yeah. OK. No, and I get that. Especially for small-to-medium enterprises, right, that's, um, time is a great issue, as well, isn't it, for the smaller operations?

B: Yeah and there is, there is, um, there is a publication, I think it's called, um, it's like the industry insider, it's digital edition that comes out pretty much every week.

M: Yeah, the Adventure Park Insider?

B: Yeah, that's it. If you read this week's, um, issue, you'll see pictures of our organisation in it, you'll see my picture in it for that award. We also won a separate corporate award in marketing, so... that is, that is an inexpensive way for these smaller operators to gain some insight into what's going on and what the challenges are.

M: Yeah. Yeah. No, there's no doubt, I think, that Adventure Park Insider has been quite popular, hasn't it, because a lot of people are mentioning it, um, I read it as well. Um, yeah, it's been really good.

B: Yeah.

M: Um, so, again, going back to leadership, how important do you think leadership is for collaboration, um, to be successful in the industry?

B: Oh, I think that it's good, because it proves that you, you really need to take your selfish needs out of it and realise that you really need to be, not only concerned with your organisation or your specific site, but with the health and welfare of the industry, so leadership really, kind of, forces you to be unselfish and commit to a greater purpose.

M: Yeah, and, and that's actually a great point, what you just made there, about, um, having this more of a macro look of, you know, instead of just focussing on your own indu, your own park, but the whole industry, yeah.

B: Correct. Yeah.

M: Um, and so, I know in [intentionally left blank] they're just starting talking about, um, regulating the industry. Do you think that the industry collaborating with public agencies on risk management, do you think that's beneficial?

B: Well, it can be, but I mean, with my experience in municipal parks and rec, their risk management is insane. It is absolutely insane.

M: Oh, really?

B: Yeah. Right, they have insurance adjusters that walk around their parks several times a year doing analysis of, you know, risks of the facilities, you know, whether it'd be swimming pools or boardwalks or rollerblade paths or, um, nature trails, um, they really micro-manage it, because it's public dollars that have created these sites. Um, in commercial recreation the standards, um... I guess, the spotlight from insurance agencies are just as intense if you are adhering to that national standard.

M: Yeah. Um, are you... are you hoping that the state will adopt the ACCT standard, or?

B: Um, well, I don't know enough about it just yet, but the story just came out, I just read about yesterday, um, and again, they're just saying that the, um, the Amusement Park Division of the Department of Labour, we would be administering over top of these

facilities, but, again, we may be exempt, because our zipline is so short. That... I'm not saying water it down, but I think it could be extremely complex and hinder things if the state gets involved.

M: Yeah. And, um, how? Is that, again, going back to what you said earlier about over-doing it?

B: Over-doing it and the state normally, um, do you, do you know what OSHA is?

M: Yeah, yeah, yeah.

B: Occupational Safety and Health Administration. The, um, we have [intentionally left blank] OSHA in [intentionally left blank], so it's the [intentionally left blank] Occupational Safety and Health Administration and they micro-manage things even more. The state of [intentionally left blank] is going to require, they would most likely require these facilities to follow [intentionally left blank] OSHA standards. Do you know what I'm saying? So, I think it would really create a lot of unsureness and ambiguity in the way parks are operated and even developed.

M: Yeah. But, what does OSHA, or [intentionally left blank] OSHA, what do they know about aerial adventure parks and ziplines?

B: Not a lot. Not a lot. So, what they do is they impose things on, you know, lifting standards for public works employees, so people that are on, and lineman employees for utilities, so there's a whole set of standards. I know, because my nephew just graduated from lineman school in Georgia and so he's been trained on all of these industry standards and safety standards set by these public, these public commissions. Um, standards set by ACCT are much different and they're set for much different reasons, so I think it would be a, I think it would be a negative thing. Um, I just think there'd be a lot of red-tape and a lot of worry and I don't think these agencies would really understand how our parks are built and how are elements suspended? Really understand our safety practices, because our practices are very interactive. We don't harness anyone, we teach people to put a harness on and how it should fit and feel and how to adjust them themselves and to know when it's not right, how to get help. Um, that's, amusement park rides you don't teach people anything, you say, "sit in the seat and we'll strap you down".

M: Yep, that's it.

B: You know, ours is a much more interactive experience, because it's a self-guided system and we can't babysit you for three full hours, making sure, at every platform, that your harness is adjusted correctly. We teach you how to, how to feel and, and adjust it yourself and know when it's not right and know how to ask for help and then we'll make sure we're available to provide the help when we're asked.

M: So, um, would it be better if, um, the, the state, kind of, reached out to, say, the ACCT and said, you know, "help us write these standards" or, you know, "help us write these regulations"?

B: I think, I personally do, yes, but there's even another agency that could be involved. I don't even know what the acronym stands for, but it's ANSI. A N S I? Yeah, and they have a separate set of standard for these things. Um, you know, so, it's like, we really follow and are accredited, we're accredited through the ACCT, so, now if we have, would have to follow other safety organisations' mandates, it would just completely muddy the waters. We would have to hybridize the safety system that complies in three different ways.

M: Yeah. I guess, that's one of my questions as well. There are so many different standards in the industry, right, you said ANSI and there's ACCT, there's ASTM and PRCA and so on...

B: Yeah, right?

M: [...] um, which, I guess it can be quite confusing. Would it be better if there was, kind of, one standard that the entire industry follows?

B: Yeah. Yeah. Yeah, I do. I do feel that that would be the best thing.

M: Do you think that's likely? Or is that not something you've considered?

B: No, I don't think, I, unfortunately, think it's not likely, because you have so many operators that don't, that aren't accredited. So, as I said, the religious camps, and even the day camps, the site that we're on here had a, had a day camp low-ropes climbing facility that was atrocious and we cut it down for them. It was built, it wasn't built to any standard at all. Um, so, I think... again, I think that the chances are that they're going to require, at the state level, people to follow two sets of standards at least. So, it picks up all these mom and pop, local, you know, even the regional religious camps, YMCA camps have these climbing parks and ropes courses and, um, there's even some very small private operations that are in development locally. So, it's tough. I, I have a feeling that the state mandates are going to have some transaction and we'll be faced with some double-standard.

M: That sounds really complicated, difficult for you, as an operator, to, um... yeah, how that's going to affect the operation. I mean, do you think that it's an, is it an issue that, um, there is, perhaps, a lack of industry experience on the public side, you know, public agency side?

B: I don't know if that's what I'm looking at so much as you cannot force, I mean, you can't really force industry, um, we have the Labour Standards Act in [intentionally left blank], it's called LARA, and they really can't force a business to put, to follow a private industry standard. See, ACCT is, you know, it's a non-profit and it's a national standard, but it's not, it's not controlled through the government, it's an accepted standard. So, what this Labour, um, Standards ACT, this Labour Standard ACT and office could do is say, "yes, you must follow the OSHA standard" and say, "you must follow..." the regulatory affairs is what they really are, "you must follow these amusement park ride standards", um, because they can impose that on the small mom and pop operations. The religious camp doesn't operate under any standard and just operates its facility and pays the outrageous insurance rates that they have. You know, government, the regulatory affairs can't say, "You must follow ACCT". They're going to have to say, "No, you must follow, follow the state system".

M: OK, so, the state would have to, kind of, write up their own standards, um...

B: Yes.

M: [...] um, so I guess, you know, the ACCT or the ASTM, um, or whatever, you know, they could still influence that, in some respect couldn't they?

B: Yeah, they could, but will they? Will they? Because, we're one state out of many.

M: Yeah. Yeah. Well, one can only hope so, yeah.

B: Right. Right.

M: Um, and do you think that, um, in terms of the collaboration, um, should it, is it effective to do it on a state-by-state basis or do you think it's better to do something on a more federal basis or local level?

B: Well, that's a hard question to answer, because I'm so new. I'm really... this will be my fourth season doing this and that's a really deep question and I'm really not involved in a lot the industry affairs. I'm much more focussed on, as an operator, what we're doing here locally. Um, I don't think I'm really qualified to answer that question.

M: Right. Oh, OK. No, that's, that's absolutely fine. Well, I mean, [intentionally left blank], I only have one more question, really.

B: OK.

M: Um, and it's just, going forward, what do you think the future holds for the aerial adventure industry?

B: Well, I'm qualified to answer that question.

[Laughter]

B: As fast as it's expanding, here, here there, I think, there's potential benefits and there's potential risks. The benefits side is that it will expand and provide these experiences for individuals, kids and families and corporations and provide a safe experience for years to come and get people more active and get outdoors and in touch with nature and built closer family bonds, ties. Um, that's a great thing. On the negative side... um, first, let me explain my experience in the golf industry. So, after the economy tanked in the US, especially in [intentionally left blank], with the [intentionally left blank] industry, people had much, much less discretionary income, they had much less, so what happened with golf, because golf is an expensive leisure activity, so people had discretionary time after the economy tanked, but they didn't have discretionary income. So, we found ourselves with a saturation of golf in [intentionally left blank]. Too many golf courses, because when the economy was thriving, everybody had money to golf. Golf's not cheap, the equipment's not cheap, you've got to have the skill set to do it. Um, it's a big commitment. So, people, it was one of the first things that they cut out of their budget, was golf. So, golf courses, in many states, but especially in [intentionally left blank], were struggling. So, we had, um, you know, we had, kind of, the dead-weight fall off of the golf industry in [intentionally left blank] and only the, the, only the golf courses that could sustain themselves operationally and, you know, efficiently remained. So, we had a reduction of golf courses in [intentionally left blank], um, exceeding 40% in the last 15 years, um, because of that. I think that if this industry grows too quickly, especially in the [intentionally left blank] region, and the economy does falter, it will falter again, everyone, every nation's economy has highs and lows, then you're going to see an industry that, I don't know if the industry will suffer, but you're going to see a lot of operations that scale back on things. So, I think you will have operators that scale back on, maybe not safety, but they'll scale back on their experience and their equipment and their marketing and the service that they provide to the

customers and I think that will carry through to the guest experience. So, people that may climb 2 or 3 of these operations, um, adventure parks, or challenge parks, and have a negative experience, may think that that is a representation of that experience entirely. So, I mean, it's not just what we report, but the [intentionally left blank] of [intentionally left blank], I mean, we, we are the best at what we do. So, we worry. We want people to climb other parks and then come and climb our park and realise this is a much, much better experience. So, I really do worry about the future. That, you know, the big [inaudible, you know, drastic expansion, it is the fastest growing, um, fastest growing niche in outdoor recreation in the United States, maybe worldwide. Um, I think it hit its peak over in Europe, you know, 15-20 years ago and now they're going through the same thing I just talked about in golf, where the modest and small operators are falling apart and only the big, most efficient operators are still operating with some level of success. I worry about that, in our region, and in the US that, that things can become saturated and when the economy takes a dip that it'll affect everyone.

M: Yeah, because they seem to be popping up everywhere at the moment, right?

B: Yeah, we have two competitors coming in very soon.

M: Two? Oh, I thought it was just one.

B: No, there's talk of another one. Um, there's talk of another small one coming in within a 40 minute drive. It may take a few years to develop, but, we did interact with them at the conference and they, their resources are limited, but they're still going to do it.

M: Right. That's a concerning thing.

B: You worry that they'll offer an experience that's much less expensive, but it's a poorer quality experience. So, people experience that once or twice, they don't want to spend money on a ticket at the [intentionally left blank], which costs them twice the amount. So, it's a worry, you know. I think, the way the safety standards are going, the future is bright and the safety standards are built, not always, to complicate things. Sometimes, safety, safety standards are put in place, because it can offer a more common sense approach, make it safer, and make it more beneficial operationally. So...

M: OK. Oh, wow. OK. That's interesting, actually, you know, about them doing it on a, you know, limited budget, you know. That's, kind of, what made me get into the study-side of this as well. Because, they don't have to follow any standards in [intentionally left blank], right? So, they could, kind of, do it on a shoe-string budget if they wanted to.

B: Right. Right. Now, I mean, what makes us so successful is the amount of money we spend just on marketing, alone, just at this site alone, probably surpasses the entire payroll of some of these smaller competing parks, so...

M: Oh, wow. OK. Yeah, no, I get that, yeah. Well, I mean, [intentionally left blank], that's actually I have, um, for questions. Thank you very much for your time and I'm sorry we went over the one hour, I told you it would only be one hour, but, um it's been a little bit longer.

B: No, don't worry about it. Um, so you'll get me a copy of, um, of your tabulated results?

M: Yeah.

B: That'll be great. Sometime this summer, I hope.

M: Yeah, I hope so too, fingers crossed.

[Laughter]

M: Yeah, basically, I'll send a copy of the, um, of the recording, sorry, to you and then I'll send a copy of the transcript to you as well and then, obviously, once I've done the whole report, you'll get a summary of that as well. But, yeah, like I said, keep your fingers crossed and have a lovely 2017 season!

B: Alright. Good luck to you, Marcus.

M: Thank you very much. You take care.

B: OK. Bye-bye.

M: Bye-bye.

Call ended

Participant 13 Conversation

B: Participant O: Operator M: Me

O: [Intentionally left blank].

M: Oh, hello, is [intentionally left blank] available at all please?

O: I believe he's in his office. Who's calling?

M: Um, Marcus Hansen. He's expecting me.

O: OK. One moment.

M: Thank you.

O: You're welcome.

B: Hi, this is [intentionally left blank].

M: Hey, [intentionally left blank], how are you doing?

B: Good thanks.

M: Good, good. Um, is this a good time to talk?

B: Yeah.

M: Oh, fantastic. Fantastic. Um, thank you very much for, once again, taking the time out to help me out with my studies.

B: No problem.

M: Um, so I just want to remind you, again, that I am recording the call and, um, just like last time, I'll send a copy of the recording to you, um, but I will also, I don't think I did this last time, but I will also send a copy of the recording to you.

B: That sounds great.

M: Um, yeah exactly. And then, um, once I've finished the study, I'll also send a summary of my study so you can, obviously, see what my findings were like.

B: That's great.

M: OK. Yeah, obviously, it's all confidential as well, so any possible identifiers, um, I'll leave out of the transcript as well.

B: OK.

M: OK. So, um, before we start, do you have any questions at all?

B: Um, no I don't.

M: OK. OK. Brilliant. So, um, please tell me about your role at the state.

B: I'm the supervisor of the Carnival and Amusement Ride Safety Unit for the state of [intentionally left blank].

M: OK. And, um, how, um, are you involved at all with the, um, aerial adventure parks?

B: Yes, um, we have, um, every, every ride that comes in, new, to [intentionally left blank], um, I have to sign off on, so I, I don't do a complete review, but I do a review, enough to see that the people who have done the review, um, did a complete review.

M: OK. OK. Um, and how, how many, do you know how many aerial adventure parks you have in [intentionally left blank]?

B: You know, I don't really know. It's around 4, but I'm not actually positive.

M: OK. No worries. Um, now, when did you start as the, um, when did you start regulating the industry?

B: Um, in 1999.

M: OK. Um, is that the same for the aerial adventure parks as well?

B: We had our first aerial adventure park, probably, 4 years ago and that one's up in [intentionally left blank] which [intentionally left blank] knocked down.

M: Oh, yes, I remember. Did they rebuild that?

B: Um, they did rebuild, um, when they rebuilt they didn't use natural trees, they used telephone poles. But all of the other ones use natural trees.

M: Oh, wow, OK. So all the other ones are in the trees? That's interesting. Um, now, um, the other parks that you have, you said you had 4 parks in total or whatever, um, are they all commercially based or are they the traditional ropes courses?

B: Um, I'm not exactly sure what you mean by that, but they all charge for people to go and use them, if that's what you mean?

M: OK. Yeah, basically. Um, I don't know how familiar you are with the industry, but, um, before this all went commercial, you know, high throughput, um, they used to use the ropes courses for, just, you know, team building and so on and that's what I was trying to gauge, whether it was more the theme-park style, if you like?

B: Yes, that's what it is. At least, that's the ones that we do. Um, there are probably some ropes courses that we don't regulate, that are team building kinds of ropes courses.

M: Oh, I see. OK. OK. Um, but you're not involved with those at all.

B: Right.

M: OK. Fantastic. Um, now, in terms of the aerial adventure parks, what do you believe is the key attraction to them?

B: You mean, what attracts people to them?

M: Yeah.

B: Um, I believe that just being able to, um, walk along the, the elements and, you know, find your way through the elements and doing it in a way that you feel that you're being challenged and, um, a little bit unsafe, but that you're really safe.

M: Mm. OK. OK. Um, yeah, actually, that leads on to my next question, really. How do you, um, what role do you think that this, um, thrill-seeking or, or potential risk-taking plays in the overall attraction of the parks?

B: Well, I think that the, um, that it's a primary role. That people are really doing it, um, sort of, believing it, or, yeah, I guess, believing that they're, they're actually taking a risk. Um, and I think our job is, basically, to make sure that they're not taking a risk.

M: OK. Yeah, um, how do you do that, um, [intentionally left blank]? What procedures, um, what does it involve for the state of [intentionally left blank], I guess.

B: Well, the primary thing that we do is we, um, force them to have continuous contact with a safety cable, you know, so they're continuously running on a safety cable. Um, there's basically two ways that the manufacturers have chosen to do that: one is to have a continuous safety cable that will always be attached to that safety cable; and another is to have two, um, attachments to the safety cable and you can take one off and the other one,

you can't take it off while that one's off, and then you attach it to a different safety cable and you can take the second one off and attach it.

M: Oh, wow, so you've, um, you have to have that by law, basically?

B: Yes.

M: Oh, wow. Fantastic. Um, and do you inspect the courses as well or?

B: Yes, we do. I have, um, only done an operational inspection on one of the courses, I've never actually done the physical inspection on the courses.

M: OK. Um, is it, do you rely on a third-party or?

B: No, no. I have inspectors who do that.

M: Oh, I see. Oh, OK.

B: I have about, I have about 20 inspectors who work [inaudible].

M: 20?

B: No, me as a person, I have only done one operational inspection.

M: Oh, OK. 20, so it's quite a big department you've got then, [intentionally left blank]? Oh, wow.

B: Yes.

M: So, um, just going back to risk management again, um, what do you, or do you define risk?

B: We basically, our philosophy is to keep risk very low. Um, we came up with a mission for our unit and our mission is to assure public safety on all amusement rides and we all are looking at that and reminding ourselves of that every day.

M: OK. So, um, I guess, bearing that mind, what are the key challenges that you face, or the industry faces, sorry, in risk management, the way you're looking from the outside?

B: Um, from, well the aerial adventure industry, I think, has chosen to use natural trees and, um, there's always a risk using natural trees, because you can inspect them one day and they look fine and then the next day the tree could fall down. Um, and you have, they, they have arborists who come in and do the inspections, um, of the trees and the arborists are pretty good, I think they're probably going to find the trees that are going to be a

problem and making sure that we're not going to be using those. But, still, I know from my own yard, I had 22 in front and 18 trees in the back and, you know, I was constantly mowing around them, so I was constantly looking at them and, you know, sometimes a tree, or a huge limb from a tree would fall and I had no pre-warning of it at all.

M: Right, OK. So, it's the uncertainty of the, um, building in the trees, whereas, I guess, you referred to [intentionally left blank] build on poles now, um, yeah, um, they don't grow right?

[Laughter]

B: Yes, they don't grow. They don't push out through the, the metal, the hardware that goes into the tree, because there's no tree there.

M: OK. OK. Now, how, um, I guess, some of the challenges that the industry faces, how do you think, then, that innovation has affected the industry? Good or bad or?

B: I think that, um, innovation has been good, um, you know, with, for example, um, several people we know have gone to other states where they don't have the kind of rules that we have and they get to the platforms and you can unhook from one safety cable and hook up to the other safety cable. During that time, you're only a 12x18" platform, you could fall right off. You know, a good gust of wind or something could blow you off. So, I believe that we've made things, um, you know, by the way, we don't, um, ever do the designs ourselves. We only require the safety. So, when we said, "how are you going to make sure the people stay on the course and don't fall off?" that's what the manufacturers came up with. So, we didn't do those designs. Those were done by the manufacturer.

M: OK. I see. OK. Um, and again, on the challenges then, um, what role do you think the human factor plays on the challenges of risk management?

B: Well, that's, kind of, what we were trying to take out.

[Laughter]

B: Um, you know, um, because, um, you always have, especially, when you have people get familiar with it, they begin to get, um, I can't remember the right term, but, you know, you get to, to thinking you know it...

M: A little bit over-confident?

B:... and you can take some more chances with it and that's, kind of, what we're trying to take out of it is to make sure that, you know, when people get to that careless, um, "I can take more chances with it"-state, they still can't take more chances.

M: Right. OK. Yeah. Um, yeah, so, I mean, basically, you've ensured that they don't have to think about the transfer process, as such, up on the course.

B: Right. Right.

M: Because, I think there was a lady that fell off a course in Delaware, wasn't it? Um, last summer, I think, where she basically unclipped her carabiners completely. Um, I think it was Delaware or Maryland, yeah. Um, OK, well, bearing that in mind, [intentionally left blank], um, what does effective risk management look like to you?

B: Um, effective risk management, and you're talking in terms of the trees, or these courses?

M: The courses, yeah.

B: Basically, I think you need to look at what people can do and then counteract what they can't do and make sure that they are not able to do some of the crazy things that they can do.

M: Um, would you describe it, kind of, as an all-encompassing approach, um, that they need to, kind of, bear everything in mind or?

B: Yeah, we try to do that. That's what we really try to do, an all-encompassing approach. Um, and we're not always successful, but, you know, we're witness that there are, are accidents and, and I don't believe that we've had any accidents on tree courses yet, but, you know, in our state we've had a couple of deaths on other rides and we try to stop that from happening.

M: Well, I guess, given that you've already got a number of other, um, amusement rides in [intentionally left blank], you've probably got experience that you can draw on from there and so on, can't you?

B: Yeah. Um, we have about 3500 rides operating right now.

[Laughter]

M: Yeah, so it's not small-time, then?

B: Yeah.

M: Um, now, in regards to the aerial adventure parks, do you, um, are your rules and regulations, um, are they based on specific standards?

B: Yeah.

M: Yeah? Which one do you follow, sorrow, sorry?

B: There's, um, right now we follow our own regulations, um, but we will allow, now, I'm not going to remember, I don't remember the exact standard right, but there is, there are two standards that we will allow people to use, besides our rules, instead of our rules, um, but they, if they use, and no one has chosen to do it, but, if they use those standards, they have to use those standards completely, they can't just partially go pick and choose from which ever standard they want or whichever rule they want. They have use that rule completely.

M: Right, OK. Um, would it be ASTM or ACCT? Do they sound familiar?

B: ACCT was one of them and ASTM have they actually issued their standards, yet?

M: I believe so, yes. Yes.

B: Oh, OK. Once ASTM's, um, once we adopt ASTM, then we will stop using any other standard, most likely. Because, what we're trying to do, as a state, is, we're trying to get as close to ASTM as we can.

M: OK, yeah. That's what I've heard, so far, as well, in my, um, research, is that a lot of states are, or the ones that are adopting any standard, seems to, or tend to adopt the ASTM standard. Um, OK. OK. Um, so, um, how do you monitor that risk management procedures are being followed throughout the state, then?

B: We, um, we have an annual inspection that we do. Um, and we don't just inspect the course, we actually inspect their maintenance logs and their daily checklists and things like that, to make sure that they're doing those things and we check their training records to make sure that the, the maintenance people that they have are getting trained regularly and that the operators that they have are being getting trained regularly. Um, we have, and then we have, we also go, we have one annual inspection, we also go a couple of times during the season, sort of a surprise inspection to see how they're doing and then we have what we call operational inspections that, that's, I've done one of those on the aerial

adventure courses, and, basically, we go and watch them operate and, and see how, how they're actually operating.

M: Oh, OK. How, how often do you actually do the operational inspection, sorry, [intentionally left blank]?

B: Um, we like to have them think that we're out there all the time.

[Laughter]

M: Yeah. OK

B: We, um, we do them, um, I guess, pretty much continuously when they're open. We're not there every day, but we could be there any day, if you understand?

M: Oh, OK.

B: So, we have people out doing operational inspections all the time.

M: Wow, OK.

B: And we do them in off hours as well and on weekends as well, so they can't really think "oh, this is a time they're not going to be here we cannot do as well as we should".

M: OK, yeah, it's about keeping them on their toes, isn't it?

B: Yes.

M: Yeah, basically. Um, now, between, I guess, um, yourself and, um, your staff, what lines of communication exist, um, between you guys, in terms of sharing knowledge on risk management. So, what your inspectors are seeing when they visit the parks and so on.

B: Um, our, our, we have three area inspectors and they generally hold weekly meetings with their people and I hold bi-weekly meetings with my supervisors and, um, we had, just had, yesterday or the day before yesterday, um, a big staff meeting where we air all the problems that we've had and found and so forth.

M: Oh, wow. OK. Um, so, is that, um, so the team meetings, is that, that's kind of how you, um, empower your staff to share the knowledge that they possess and so on?

B: Yes.

M: OK. And how important do you consider this, um, in terms of, um, obviously providing regulation to the state in general? How important do you consider this information that they sit on?

B: That each team has?

M: Oh, yeah, or the inspectors. Your front-line staff.

B: Yeah, the inspectors, they're like the first line of people and they're the first ones to notice when there's a problem, you know, because up in the office, we have 5 engineers up in the office who are reviewing the, the designs before they go out into the field, um, but the inspectors are the ones who, usually, are the first ones to see where there's a problem.

M: Oh, wow. OK. So, um, just going back to what you said about you have, you also have engineers in the office as well as inspectors?

B: Yes.

M: Oh, wow. So, do you look at the drawings as well when they submit to build the park in your state, for example, do you go over those as well?

B: Yes, we go over the drawings and we go over the calculations. And they have to calculate for the load of people on the elements and they have to calculate for the wind loads and seismic loads and snow loads on the elements.

M: Snow loads as well? Of course, of course. Now, these engineers that you have, are they, um, do they have experience with the industry as well, as in the aerial adventure industry, or?

B: No. Um, they're, um, we have one engineer, two engineers, myself and one other engineer who have experience in the amusement field. The other engineers all came from, basically, straight from college to our group and they, um, they're gaining their experience by working with us.

M: I think this is, certainly that I've heard of, this is the first time I've heard of a state where you've actually got in-house engineers. That's really cool, that is. Um, so how do you learn from your staff's knowledge, then? How, as a manager, do you learn from them?

B: Basically, as I told you, I have to review every single one of those reviews that they do. So, I go through what they've done and make sure that they're meeting our regulations on how to do the review and a lot, that's how I found out about a lot of the problems that we,

we have with certain rides. You know, for example, the mechanical bull ride, the engineer who was going to review the first one of those said, "I don't see how we could possibly let this into the state, because the idea of the ride is to throw them off the bull and our regulations say you can't do that".

[Laughter]

B: So, but, we came up with, the, the manufacturers came up with a way of making that ride safe and now most of the states do it the same way, most of the manufacturers do it the same way.

M: Oh, wow. OK. So, I'm sorry, how did you end up accepting it if it's, basically, against the, the rules.

B: Because, well, what he did, what they did, you know, he just kept asking them questions until they came up with the idea themselves, but, basically, what they've done is they surround the bull with an inflatable, so they can't ever land on the ground and as soon as they come off the bull, the bull stops, so the bull can't continue to beat them up or if they fall under the bull it won't crush them. That sort of thing.

M: Right. Yeah, that's a good idea actually. So, um, how important do you think that leadership is, um, in effective risk management?

B: Leadership? I think, I think leadership is important and the individual person, um, looking at risk management, is, because, he's basically has to, kind of, you know, the, um, the manufacturers person who's looking at risk management, has to be coming up with scenarios, you know, he has to think of, "how could someone possibly misuse this?". You know, because, we all kind, you know, I used to design rides myself, and we all have this idea of how people should use it and how they can use it, but we also have to come up with, "how will they possibly misuse this and how will I possibly overcome that?".

M: Sure, yeah. OK. Um, now, do you, I assume you don't have much industry experience in the aerial adventure industry, or?

B: The adventure course industry?

M: Yeah.

B: I had non to start off with and no one here had any start off with.

M: Yeah, well, so did you find it challenging to look at it and say, “Well, how can someone misuse this?”.

B: Yeah. Um, but, but, again, we depend on the manufacturer. You know, the manufacturer has to tell us. You know, they do their risk management study and then we look at what they did and, you know, sometimes we think of new risks that they hadn’t thought of, but we, we look, mostly we’re learning from them, especially on a new type of ride, like an adventure course, like this, when that was new to the state, basically, what they were doing was teaching us about it.

M: Oh, wow. OK. Did you find they were good at that? Were they open to you, or?

B: Um, for the adventure course people, yes, they were open to it. Some of them saw us as an annoyance, but ultimately they all cooperated with us.

[Laughter]

M: Um, how long, then, just out of curiosity, [intentionally left blank], how long did it take you then to, um, to come up with the rules and put them in place for the state, for the aerial adventure courses.

B: Um, the rules, we actually didn’t come up with new rules for the adventure course yet. We’re using them within our old rules, the ones that we’ve always been using. Um, but, it took us a while to fit the adventure course into our rules. I’d say the first one probably took us 8 months or so before we were able to figure out how it fit into our rules and the second one, well, I did the second one myself, and it took about six months.

M: Yeah, because, by that time you were pretty familiar with it and so on.

B: Yeah.

M: Yeah, because, I think, last time we spoke, you only had one park in the state and you have four now.

B: Yeah, and we have one more coming.

M: Oh, really?

B: Yeah.

M: Oh, when’s that opening?

B: Um, they haven't even submitted the engineering for it, but, um, I have a feeling that it'll open sometimes next year.

M: Oh, that's brilliant. I mean, like I said, when we last spoke I was, um, surprised there was only one park given the size of the state, right? And your proximity to other massive cities, right?

B: And we have actually one that's not, not in a, in a forest setting at all. One of the casinos actually built one, inside the casino. But, that one, they also have not submitted anything yet, so we haven't reviewed that at all, but it is supposed to be coming there as well.

M: Oh, like, um, an indoor park basically?

B: Yes.

M: Oh, wow. OK. Um, do you know much about it, because I know there's a big company that does metal structures indoors?

B: Yeah, we haven't gotten any information from them at all yet. They haven't submitted anything to us. So, we don't, we understand that it's already built, but they have not submitted anything and they cannot open until we do our review. I think maybe the owner of the, the, um, casino, you know, they haven't ever dealt with amusement rides before. Maybe they don't realise. We've tried to, we've written to them several times and tried to explain to them that we, they can't operate it until we've approved it, but they're, so far have not submitted anything.

M: Oh, that's interesting. But, he's definitely not open, though, huh?

[Laughter]

B: He can't open it until. He's not, he's not, the whole thing is not open yet, the casino is not open yet neither.

M: Oh, I see. OK. Oh, so it's not an existing casino that's building one inside?

B: No, it's a casino, the casino's built, but they, they have not been able to open yet.

M: Oh, wow. That's really interesting. It's an interesting mix, though, huh? A casino and then a family attraction.

[Laughter]

B: Yeah. They have, that's not the first one that's done that. Um, Trump Taj Mahal Casino and Steel Pier are right together and so, and Steel Pier is an amusement park, and so, it's not an unusual combination and we have another place that's building a rollercoaster, so it's not an unusual combination and it's probably, I think, it's probably a natural combination because parents can bring their children and, you know, they can go gamble and send their kids out to the amusement park.

M: Oh, that's a good point, actually, [intentionally left blank]. I hadn't thought of that. No, it's, um, I'm amazed at the various places that they find for these parks, because, I know down in Florida, um, there's a massive mall that has one indoors as well, um, and obviously they're in the trees and so on, so I guess the sky's the limit, right?

B: Yeah. Yeah.

M: Yeah, um, so, how, how do you think, then, that an incident at one park, um, in the aerial adventure park, courses, how may an incident at one park impact the rest of the industry?

B: Um, I think it impacts them dramatically. Um, I think that we're all paying attention all of the time and just, for example, on any other ride that there's an incident, the first thing we do is say, "do we have one of those?" you know, and then "could the same thing happen on the one that we have as the one that they had?". That kind of, you know, so I think it has a dramatic impact.

M: OK. Yeah. Um, so how do you collaborate, or do you collaborate with the aerial adventure industry? Um, with your stakeholders and so on.

B: I don't collaborate directly with the aerial adventure industry, except from through the ASTM. I'm working on, I'm on the committee that's, that's doing, I'm not on the aerial adventure committee, I'm on the inflatable committee and a couple of other ones, but I'm, I'm a member of ASTM and I have to read all of the new rules and say whether I agree with them or not, comment on them. So, I have that. Um, things were pretty, the reason I might not know about the aerial adventure having passed is because things have been pretty busy here in the last couple of months and I may have missed it when it went through. But, um, otherwise, you know, I'm pretty on top of that and then we have a group called CARES. Um, let's see, what does that name mean exactly?

M: How is it, is it just C-A-R-E?

B: C-A-R-E-S.

M: Oh, OK.

B: I'm not remembering right off the top of my head, what that term exactly means.

M: Oh, OK. I can always send you an email, [intentionally left blank], and ask if there was any chance you see what it means.

B: Yeah. I'm trying to find it right now. I could give it to you. Um, let's see. No. OK. CARES is. Shoot.

M: No, it's alright, [intentionally left blank].

B: I just read it this morning and I can't seem to put my finger on it just now. But, yeah, if you send me an email I'll get it out to you.

M: Yeah. What is it for?

B: But, basically, what CARES is, is a group of regulators like myself who, for each state, we have a group and actually we have some, it's both in Canada and the United States and then we have people from outside who are also, like, they're not members, but they're adjunct members from Great Britain, from Singapore, um, from a couple of other countries.

M: Oh, so it's international, almost? Well, it is. Yeah

B: Yeah, well it is international anyway, because it's Canadian and American.

M: Oh, yeah. Yeah. And what do you do there?

B: Basically, what we do, we talk about, you know, when there's an accident, um, whichever state, because the one that I was reading this morning, for example, was an accident that happened on a Ferris wheel and the, um, the state who regulates that Ferris wheel, um, um, sent out a bulletin, basically, of pictures of, of what happened and, um, with the information for, OK I got it now.

[Laughter]

B: It's the Council for Amusement and Recreational Equipment Safety.

M: Council, Recreational.

B: Equipment, Safety.

M: OK, fantastic. Thank you very much, [intentionally left blank]!

B: You're welcome. And it's a Canadian and American group. It was put together by Canadians and Americans to gather, so it's been international right from the start.

M: Oh, wow. OK. And so you collaborate with each other, um, and talk about things that are going on in the industry, basically?

B: Right and things that are going right. You know, we, we, um, if we find that somebody's come up with a unique solution to something, we share that. Um, if we find something that's especially bad, that there's a problem with, you know, we share that. Um, the US Consumer Protection Agency is also a part of it, um, they're also a member. You know, when we found, we found one ride that we had some serious problems with, we sent a letter to them and they put out a consumer safety bulletin, basically telling everybody to, you know, don't allow one of these rides to operate.

M: Oh, wow, that's really, that's really powerful, actually.

B: Yeah.

M: Oh, wow. So, you've got the, um, the US federal government involved as well, then, haven't you, in that sense?

B: Yeah, mhm.

M: Wow, OK. Now, um, do you, do you discuss the adventure courses in there as well?

B: Um, most of them don't regulate adventure courses, so we have not, as far as I remember, we have not discussed adventure courses, except that when [intentionally left blank] hit the one up in [intentionally left blank] I did bring that up and tell them about it.

M: Um, so how do you, how do you, um, or do you communicate at all with the, um, aerial adventure course, um, I know, you said, through the ASTM, um, I guess, in terms of when, to find out what's going on in the industry and so on, how do you keep up to date?

B: Right. All, um, just through ASTM, basically, is all I do.

M: OK. OK.

B: You know, with 3500 rides to regulate.

[Laughter]

M: Yeah, I know, I know, yeah. There's quite a lot going on in your state. Um, do any of your, any of your inspectors, do they communicate with the industry as such?

B: Generally, they don't. Generally, any communication with manufacturers is done through, through engineering. So, if an inspector, if an inspector finds something that's an issue, then they'll let engineering know and, and we make communications with the manufacturer.

M: Oh, OK. Is it something you'd like to do, down the road, um, have more involvement in the industry or?

B: Um, right now it's a really small subset of what we're doing, so I think probably not.

M: Um, so in general, um, do you see any benefits to collaboration?

B: Oh, absolutely. I think that, really, um, collaboration is probably the most important thing to do in, in any amusement situation, um, because we all can't, you know, when you were talking about risk management, we all can't think of all the possible scenarios that, that people can use to hurt themselves and, so, just collaborating and seeing what other people have found and seeing and so forth, is really important.

M: Um, and do you think there are any drawbacks to it?

B: To collaboration?

M: Yeah, I'm thinking, especially, more from the private stakeholders, um, them collaborating with each other, um, do you think there are any drawbacks to that?

B: Um, generally not, although there can be, um, you know, we've experienced occasionally, that they've figured out a way to get around us.

[Laughter]

B: So, they're, they're collaborating that way. But, um.

M: Yeah, no, the only reason I ask is that, um, one of the interviews I did was, um, the person was, um, saying that, you know, the person was quite keen on collaboration, but was also nervous about losing some intellectual property, if you like. Um.

B: Well, of course, I wouldn't have any concern about that, because we, we are, we can't invent anything, you know, we're not allowed to design anything so there's no such thing, for us, as intellectual property of our own. We do protect other people's intellectual property and we have, if we get things that are company proprietary we lock those things up and they're not available for other people to steal.

M: Yeah. Now, in order for collaboration to work, what do you think is required?

B: I, um, collaboration is a kind of difficult thing, um, and it basically requires people to be open, to listen to what other people are saying and a lot of times there's the, um, an age factory, factor, you know, not invented here.

M: Oh, wow, OK.

B: So, um, you know, like I find that a lot, actually, when I'm talking to people from other states, because we do, we have engineering reviews, which most states do not have, and, you know, most of them, kind of, look at us and say, "You're idiots for doing that. All you need is to inspect the ride".

[Laughter]

M: Yeah.

B: Um, and, and, so, you know, there, there is that aspect of collaboration, you know, um, that people will look at you and say, you know, "I'm sorry, but I'm not interested in what you're talking about".

M: Yeah, um...

B: If, you know, I could just give another example. One of the areas that I've worked at the state is propane regulation and we had a truck that, um, caused an explosion, um, and, they drove the truck into [intentionally left blank] and I called the people who regulated in [intentionally left blank] and they weren't interested. They didn't want to know anything about it.

M: Oh. How come?

B: They just said that they don't care.

M: Oh, wow. That's incredible that is. So, did it actually explode in [intentionally left blank]?

B: No, no. Actually, I don't know. I don't know, but I don't believe that it did.

M: Right.

B: It, it exploded in [intentionally left blank] and then they drove it in to [intentionally left blank].

M: Wow, yeah. Yeah, well, yeah, some people. Um, now, I know, I know you don't, um, talk to the industry, as such, but, how, how do you communicate with the, um, the

stakeholders you have in your state? So, the operators, for example, um, of the aerial adventure courses.

B: Um, we do that through our annual reviews, our annual inspections, we do that through the mechanical reviews, we do it here in the office, um, we're in continuous conversation with them while they're bringing in a new ride, and a new aerial adventure course and we've learned a great deal.

M: And would you say that the, sorry go ahead.

B: And we've learned a great deal. We started out not knowing anything and we've learned a great deal.

[Laughter]

M: Um, would you say that the, um, I guess, the line of communication between, um, you, as a state, um, and the operator is quite open?

B: I believe so. Um, and part of that comes through rules. If they have a problem, they're required by law to notify us that they had a problem.

M: Oh, wow, OK. So, any incident they had to notify you of?

B: Yeah.

M: Wow. OK. OK. Um, so, one of the things that, um, I've learned so far in my data gathering is that, um, a lot of the operators would like something like, like, a database of, um, you know, incidents that's happened in the industry on a national basis. Um, what do you think to that? So, they could, kind of, learn from it, what's going on and so on.

B: Um, I don't know, um, we haven't participated in a national database other than through SaferParks. I don't know if you've heard of them?

M: No, I haven't, sorry, no.

B: OK. There's an organisation called SaferParks and they collect a lot of data on injuries, um, but we do have our own injury data, which we collect. By law we have to collect it. Um, and all of that, you know, it's discoverable. So, usually, once a year, newspapers ask for it and we send it out to them.

M: Oh, wow. OK. So, you, you, you, um, you give, you give it straight to the newspapers as well. So, it's open to the public, if you like?

B: Oh, absolutely, it's discoverable and the Open Public Records Act makes pretty much, we can't give out confidential information, but pretty much anything that, um, public information, we can give that out.

M: Mm. Um, and the, the information that you give out to the newspapers, does it, um, specify where an incident has, has happened or is it just that you've had X amount of incidents over the year?

B: Yeah, it's just the numbers.

M: OK, yeah. OK. Um, so it's all confidential still?

B: Yeah.

M: OK.

B: And, and it doesn't, um, right now, we do not separate out the aerial adventure parks, so they would never even see those numbers, but, as I said before, we've never had any, um, injuries, serious injuries, at an aerial adventure park yet.

M: OK. Now, I don't, um, I don't know if you'll have an answer to this, [intentionally left blank], but, um, a lot of the stakeholders in the aerial adventure park industry, um, are small-to-medium enterprises. Um, do you think that, um, that being the case, do you think that that has an impact on collaboration within that industry? Do you think it could have, because, you know, they might not have as much time or money as, say, a big theme park would have.

B: Um, it would have an impact, especially when protecting your information. I remember when I worked for an amusement-ride manufacturer, one of the biggest problems that we saw was when we sold a ride into Japan, um, Japan, often, would, you know, shortly after, start making that same, those same rides again, um, themselves. Some company in Japan would get all the information, because we had to give them all the information, and some company in Japan would get the information and make the rides themselves. So, that was one of the things that when we sold a ride into Japan, we had to work really hard to get the paperwork in place that wouldn't allow them to do that.

M: Oh, wow. I didn't know that. That's, um, kind of, um, I mean, that's, kind of, theft.

B: Yeah.

[Laughter]

B: But, I mean, that's kind of what you were saying about small companies. If you're sharing information like that, um, it makes it difficult for the small company, because if you give up your proprietary information, um, now everybody has, access access to it and, um, they might be able to put in please easier than you can.

M: Yeah, yeah. Um so, do you think, I guess, similar to SaferParks, would it be a good idea for the, um, adventure course industry, um, to have something similar, where, kind of, the operators and so on can provide incident information on a, um, confidential basis, and then, um, that, I guess, industry-body would disseminate that information to the rest of the industry. So, again, it's on a confidential basis, but at least people know what's going on in the industry.

B: Yeah, I think it would be great, because I think one of the things that happened with the SaferParks data was is that, that it really showed that we're not doing a good enough job, um, with children. Um, the injuries were, um, they were a high percent of the injuries were with small children.

M: Oh, that's interesting. Was it something that...

B: Yeah. So, there might be something like that with the aerial adventure parks that we just don't know, because we're not checking the data.

M: Yeah, exactly. Um, well, yeah. I mean, one of the things that my study is focussing on is whether it's worth creating something like an industry-body like that, because, obviously, there is the ASTM that do the standards, but they don't, um, they don't share any information, as such, in that regard, um, with the public or the industry, for that matter.

B: Right. Well, they don't take that information.

M: Right. Exactly.

B: ASTM doesn't even get that information.

M: Right. Yeah. So, yeah, you think it would be quite beneficial, then, if we did that?

B: Yeah, I do think so.

M: Um, so how do you believe that, um, stakeholders within the industry can be motivated to participate in, um, such a collaborative arrangement? Because, some people may say that, um, well, you know, "I don't want to get in trouble or anything". How do we motivate them?

B: Yes. It's a sales job really.

[Laughter]

M: OK.

B: It's one of the things, I remember I used to go and talk to high schools about, um, going into engineering and, you know, I, I told them, several of them, you know, had, were thinking that engineering was a good field to get into, because you don't have to do sales and I, I said, "I'm sorry, but, everybody has to do sales".

[Laughter]

B: You know, you're, when you, when you want a new project you have to sell somebody on that idea, that, that you're going to do that project and somebody has to pay for it and, you know, all of that and so, it's all a sales job, really. You know, you've got to, you've got to spend some time and figure out what's going to appeal to, um, people. Um, what, what's in it for them? Kind of. You know, what, what've they got to get out of it? And, once they see, once they see what they can get out of it, then they're going to get on-board and they'll participate.

M: OK. OK. Um, that's quite interesting, yeah, looking at it from a, from a sales point of view. Um, now, do you think that, um, in your experience in dealing with the industry, as such, um, have you ever, because we talked earlier about, um, the lack of industry experience that, that you had when you first started, um, dealing with the aerial adventure industry. Um, as more and more states are looking at regulating, um, this, um, this industry, um, do you think that, um, going forward this might be an issue? Um, or how do you, how do you look at it?

B: Um, I do think that it's an issue, um, and I don't know exactly how to resolve it, because, you know, it's one of those things that you, kind of, have to learn as you go.

M: Mm. Yeah. Is it beneficial for the states to collaborate on it as well? Um, the individual states.

B: I, yeah, I would think so.

M: Yeah. Um, is that something you do on [...]

B: But, I [...]

M: Yeah, sorry, go ahead.

B: Yeah, it's one of the things that we try to do with CARE, is, is to collaborate on things like that.

M: Yeah, OK. Actually, you did say that. Um, so in terms of collaborating and so on, um, what role, role does, um, leadership play to ensure that collaboration becomes a success?

B: Um, again, I think it's the same kind of thing that we were talking about before. Um, one of the biggest, um, drawbacks to collaboration is that you, sometimes you have people involved in it that think that they're all-knowing.

[Laughter]

B: Or, or think that they're, you know, they're not willing to listen to other people and they have a point-of-view that they're trying to push and that, um, basically, is a turn-off. People don't want to listen and whenever that person speaks, you know, they put on the mute button. So, um, I, and, you know, everybody has something of value to add and sometimes it's just hard to listen to who are talking all the time and, you know, but they have, may have something valuable to add and they're, but they're talking all the time, you know, and you put on the mute-button whenever they talk, you know.

[Laughter]

M: Well, what, what kind of leadership approach would you recommend then?

B: Um, what, what we've, um, found somewhat helpful is that we, you know, all of us have kind of spent some time guiding the people who are an issue and try to explain to them why it's an issue and they, they, you know, want to understand, but they just, like, some of them just can't get it. You know, "I have this", you know, "I know this and I know it's right and you guys are just trying to keep me from saying it", you know. So, I don't know. I don't know how to make that happen. It's going to be a difficult thing, because you've got, you know, it really is an issue. People just want to talk, I don't know, maybe to hear themselves talk? You know, or maybe they really believe what they're talking about. In the case that I'm thinking about right now, the guy really believes in what he's talking about, but, but we can't, no one will listen.

M: Right. Yeah, I think you come across people like that in walks of life, isn't it?

B: Yeah.

M: Um, yeah, I think. Um, now I know, in your case, because you've only got a handful of parks, um, in your state, but, um, do you think it's beneficial, um, for the, the state and the industry to work closely together, um, on risk management?

B: I do. Um, and I don't know exactly how to make that happen right now, because, as I was telling you, we have about 3500 rides and there are only 4 of those. So, you know, it's, it's, to me, it's a big expense of time if I, like, I'd go to a meeting every couple of weeks or something like that, that just would be very difficult.

M: Yeah. OK. Would you consider, um, one of the states that I spoke to, um they invite, um, they invite the adventure course industry, they invite all their stakeholders in once a year, um, to chat about, you know, what's going on, what are they all seeing and so on. Is that something you'd consider?

B: Yes I certainly would consider that and if they had it in [intentionally left blank] I might even be able to participate!

[Laughter]

B: Our, our state is, um, and I think all, all the states are similar that they're so tight and, you know, there, kind of, is an assumption that if you're going to someplace else, um, it must be to party and maybe that's because, you know, the people that are involved with making decisions, that's what they do. I don't know. But, um, you know, we definitely don't go to parties for those kinds of things, but, um, they, they don't really, we have a really hard time. I have, um, I have to put in a request to go someplace more than a month in advance and then it goes through all kinds of layers of people to say whether it's OK for me to go.

M: Oh, OK. So, it's a complicated process, really.

B: Yeah, it really is.

M: Um, now...

B: And sometimes even if I'm going on my own time. Even if I'm paying for it myself, I still have to go through all that.

M: Really?

B: Yes, because, because you never know, yes, because you never really, I mean, in my position I'm always representing the state, even if I'm there on my own dollar.

M: No of course. Yeah, that makes sense. Yeah. Um, I mean, I guess, you could host it yourself at, um, your headquarters in the, in the state. I mean, the 4 parks that you have, are they spread all over the state?

B: Yeah, they're all over the state.

M: Oh, I see. OK. OK. Oh, OK, yeah, like I said...

B: But, if it was in [intentionally left blank] I could go. That's not a problem.

M: No, that's cool. That's cool. Um, OK, [intentionally left blank], I just have, um, one more question, really, and that's what, what, in terms of the adventure course industry, what do you think the future looks like for the industry, in general, in the states.

B: Um, in the state of [intentionally left blank] I wouldn't have thought that there was much here, as far as adventure courses, but it's surprised me already that we have 4 and two more coming. So, I believe that, probably, there are going to be some more that will come and then, and then it will sort of peak out because there are only so many people that will want to do it.

M: Yeah. No, that's a good point. So, you don't, you don't think it's a long-term thing? Um, you think it's a bit more short-term or?

B: Oh, no. I think it's a long-term adventure course reality that we'll, that we will have, but I, I think it will peak out. It will be, I don't know what the number is, but it, it will reach a point where it's saturated and a couple of them will go out of business and, and then we'll be at some, um, normalised level.

M: OK. OK [intentionally left blank]. Listen, thank you very much for, um, taking an hour out of your calendar for me. Um...

B: You're welcome.

M: Yeah, that's all I have. Um, yeah.

B: By the way, I had to get permission to do this too!

[Laughter]

M: Did you?

B: Yeah.

M: Oh, wow. OK. OK. So, how, how, how do you go about that then? Do you, do you have to talk to somebody from the media department or?

B: Yes, basically. But, it goes up through the channels. You know, I talk to my manager, then he talks to his manager and then they talk to the public information officer and make sure that it's all OK.

M: Wow. I did not realise that, [intentionally left blank], but I, I guess it makes sense, um, um, because I know, um, I reached out to another state as well, um, who, basically, said I had to get in touch with the media department and the media department said "no, we can't participate in that".

B: Yeah.

M: Yeah, so that's quite interesting. No, yeah, thank you very much, [intentionally left blank]. Like I said, I will send a copy of the recording to you. It will be over Dropbox. Do you have that? I think I did that last time with you as well?

B: Um, what was it?

M: Dropbox. It's, um...

B: Dropbox? I believe, I don't know that I have it on my computer, but I probably have it in my cell phone, but, but I can get any email that goes to my computer, I can get it on my cell phone.

M: OK. Yeah, because, basically, it'll just send a, um, confirmation email to you that I've shared this file with you. Um, and it's just because the file will probably be about 70mb, which is a bit more than an email can take.

[Laughter]

B: OK.

M: Yeah. And then, once I've transcribed the interview, which will be, um, probably, um, shall we say early March, um, yeah, you'll get a copy of that transcript as well.

B: OK. I appreciate that.

M: Yeah. Once again, thank you very much, [intentionally left blank].

B: Alright, Marcus. Nice talking to you.

M: Um, you take care of yourself. Thank you.

B: OK. Bye-bye.

M: Bye.

Participant 14 Conversation

B: Participant1

A: Participant2

R: Participant3

M: Me

B: [inaudible], this is [intentionally left blank], can I help you?

M: Oh, hello, [intentionally left blank], it's Marcus Hansen. How are you doing?

B: Really good! Got everyone together just sitting here waiting on your call.

[Laughter]

M: Oh, good. I'm glad we could work something out. No, I really appreciate it. Thank you very much.

B: Not a problem.

M: Um, so who've we got on the call.

B: I've got with me right now is [intentionally left blank], he's our senior inspector and, um, I've got, [intentionally left blank], she's the program administrator for our amusement group.

M: Oh, wow. Fantastic. Wow, OK. I have to admit, this is the first group call I've done.

[Laughter]

B: OK. Well, hopefully we can help you out.

M: Yeah, I hope so too, I hope so too. Um, so, um, before we start I just want to run through a couple of checks first. Um, like I said on the email, um, I don't [intentionally left blank] and [intentionally left blank], um, if you know this, but I am recording the call. Um, it's basically just so I can transcribe the call at the end of it, um, but, um, I will send a copy of the recording to you guys as well. Um, and obviously everything is completely anonymous, so, um, any potential identifiers or your names will be left out, um, as well. Um, and then we're just going to start with some basic questions about your role at the state and then some questions on risk management and then some questions on collaboration. Um, and then that's basically it. Hopefully I won't take up too much of your time.

B: OK.

M: OK. Do you have any questions before we start?

B: No, let's get going.

M: OK. OK, great. Let's do it. So, um, I guess, um, if you could, um, just, briefly, individually, tell me about your role at the state then.

B: Alright again, my name is [intentionally left blank], I'm the assistant director over all inspections for Safety Standards here at the state and, um, I've got, [intentionally left blank], he is the, um, senior inspector for amusement and then [intentionally left blank] is the program administrator for the program. She takes care of all the scheduling, registrations, permits and all that, you know, all that type of stuff. [Intentionally left blank], how long have you been with us?

A: Going on 9 years.

B: [intentionally left blank] has 9 years' experience, um, with amusement. [Intentionally left blank]?

R: 3.

B: [intentionally left blank] has 3 years. I'm about 6 months, so...

[Laughter]

M: OK. Um, oh, wow, welcome to it. How did you get into this, [intentionally left blank], um, just out of curiosity?

B: Say that again.

M: How did you get into, um... so, you've been there for six months, how did you get into this role?

B: How did I get into it?

M: Yeah.

B: Um, they said, "we need somebody to do this" and I said, "OK".

[Laughter]

B: I was previously, um, I was previously the program manager for elevators and, um, so they asked me to take on, um, a few more programs, in addition to the elevators and so, um, I gladly did.

M: Oh, cool. So, now, on the, um, aerial adventure industry, um, or the aerial adventure parks, um, how long has the state been involved with those?

A: We really just started getting involved a couple of years ago. Two or three years ago.

M: OK. OK. And, um, do you, um, is it just commercial parks or is it educational as well and so on?

B: We do them both. We have, um, church camps, I think they have some aerial adventure courses, and, yeah, we tend to all of them.

M: Wow, OK. OK. Um, and so, what, what would you say is the key attraction to aerial adventure parks?

A: Elevated heart-rate, man!

[Laughter]

A: Adrenaline.

R: Can I just say, a challenge in a nature-based environment.

B: Yeah.

M: OK. OK. Yeah. Cool.

B: Yeah, I guess, the broad answer would be, to challenge you.

M: Yeah. No, that's true, yeah. Obviously, um, we've talked about the challenges and the thrill and so on. Um, what role do you think that risk plays in the overall attraction? Or the thrill-seeking that, um, the participants desire, I guess? What role do you think that plays in the overall attraction, um, to the activity?

B: I think, personally, the riskier the better, you know, for the people that are wanting to go out and do that type of stuff, because, like Alan said, they're looking for that adrenaline rush and, so, stuff like this is right up their alley.

M: OK. Um, and so, coming from the, um...

B: Hold on one second, [intentionally left blank] has something he'd like to add.

A: I believe the higher the better, um, the more of a challenge it looks like, the more they're going to want to do.

M: I apologise for interrupting. Like I said, I'm not used to having 3 people on a call.

[Laughter]

B: No problem.

M: Um, OK. OK. So, um, obviously, you guys are coming from outside the industry, um, and looking in at, um, how would you define risk? Because, some people would say that there is an interesting relationship with risk in the, um, industry, because, like you said yourself, the riskier the better, but traditionally, perhaps, people would see risk as a negative thing. So, how, how do you view it?

B: [intentionally left blank]?

A: I would define it as, you know, a dare. If I, if it's daring for me, it's going to be a risk, there's going to be a risk involved, because there's a dare to it and all

R: And I said, it's a positive, um, when safety precautions are taken on both sides of the facility and the participant.

B: And I have determined to be negative, because I have a degree in safety, so that's just one of those things I try to weed out of everything.

[Laughter]

M: Yeah, sure. Yeah. Yes, I mean, and it is an interesting, um... I mean, what I've come across when I've done my research, so far, is that there's almost this illusion of risk, um, is what they're really looking for now.

B: Yeah.

M: Um, so what would you say are the key challenges, then, in, um... that the industry faces to risk management?

B: The patron.

A: I would say, properly trained operators.

R: I say both.

B: Yeah, I think, the, in my opinion, the patron, getting them to follow the rules correctly, because, I know, in the last 6 months to a year, we've had an accident, um, in the States, where, you know, they were transferring up in the, um, on a pole, up in the air, and they didn't do as they were told and they fell out and died, you know, fell out the ride and died. So, I just think, you know, getting them to remember and follow the directions throughout

the course. You know, the longer the course, the harder that would be, I would think. But, having trained operators is another good point as well. Making sure that everybody's aware and know what they're dealing with, you know, how to do it and when to do it, you know.

M: OK. So, um, what kind of approach to, um, risk management are you guys looking for in your, um... in the parks, or the people operating in the states, in the state?

A: Well, I mean, an effective management would be when your operators and patrons go home safely every night.

M: Mm.

B: Yeah, some of the stuff that we look for, the training that they've accomplished through the year, keeping good records of them, making sure their patrons are trained, are they going through the process on a, you know, periodic times? Um, so, just kind of, a hand-on while we're at the park. We're looking and, you know, seeing what we can see, you know, from our perspective that, that they're doing their due-diligence and training their folks. That's about the best we can do. We do not have an impact on the patrons, so, we have to keep our views focussed strictly on, on the business side of it.

M: OK. So, um, it sounds as though, um... no, go ahead? No? Yeah, um, it sounds as though, that there is a, um, at the state, that you take a, um, both an operational view as well as the building side as well?

A: Yes. We look at the operation of it and, and the building of the unit of as well, how it's constructed.

M: Oh, wow. OK. Um, do you follow any specific standards, um, at the state?

B: We go by ASTM standards and a lot of the ASTM standard is directly from the ACT standards, ACCT standard. But, ASTM is what the state has adopted to use.

A: They also go by the manufactured recommendations, you know, the stuff that they send out with the equipment that they recommend. Hold them accountable to that as well.

B: We, we can go above the ASTM standard. If the manufacturer recommends something, we go by what the manufacturer recommendations are.

M: Oh, OK. That's interesting. OK. Um, so, um, but do you recognise... did you say that you recognise both ACCT or ASTM or is it ASTM?

B: The state has only adopted the ASTM standard. But, the ASTM standard, they got a lot of information from the ACCT standard.

M: Right, yeah. OK. Um, and so, on the risk management-side, would you then, would you describe it as an all-encompassing approach to risk management that you're for from the operators? Something that includes, kind of, everything.

B: Yeah. I would say so.

A: Yeah, like we said, we're looking at the operations, we're looking at the equipment, you know, making sure that the training's going on, that they're communicating with the patrons and then we put out stuff for different patrons each year, try to have some information on that and that's about the only way that we can impact the patron is through information. So, we try to help in that area. And so, we try to, you know, get information out and inspect and do everything we can to help, you know, these parks to do the right thing.

M: And how often do you inspect, um, these parks?

A: The state [inaudible] only does them once a year and then throughout the year, if time permits, we might stop by and, and do an audit. On that yearly inspection, we look through their training records, their maintenance log and, um, that's how we do it.

M: Oh, wow. OK. Um, it's a very hands-on approach, though, huh?

B: Pardon me, sir?

M: It's a very hands, hand-on approach, it sounds like. You're very engaged in it.

A: Yes. Yeah, absolutely.

M: That's brilliant.

A: And if they have an accident, they have to be reported to us. Have to shut the ride down until they get approval from ourselves to open it back up.

B: And we'll actually go out and do an investigation on that.

M: OK. And do you do any tracking as well? Do you keep information like that? Um, you don't have to give me any specifics, but, um...

B: Yeah, we have a database. We track every inspection, every accident. We keep a log of that, so yeah, absolutely. We, um, we evaluate throughout the year to see if they have a lot

of accidents and if they do, we then we'll go out and re-visit and, kind of, figure out, help them figure out what's causing these accidents.

M: OK. And, um, so, aside from the, um, aside from the inspections, um, how do you monitor that the risk management procedures are being followed through the state?

A: We have training amongst ourselves and if one inspector goes out and sees something, we're real about sharing that with other inspectors or if we're out doing an inspection and an owner/operator tells us there's a problem, we share that among other inspectors.

B: And we do surveillance as well. And then, we mentioned the accident investigations, that's kind of towards the risk management-side of it, you know, the surveillance helps out. If they know that we're out on occasion, then they're more focussed on their task.

M: OK. Um, and so, I guess, on an internal basis, um, what lines of communication do you guys have between each other? Um, I guess, between management and staff, um... in regards to sharing knowledge, between you guys, on risk management?

A: Well, if there's been any bulletins that's come out on something, we share that with each other. Um, it gets discussed with each other, how, you know, what we found when we've done an inspection. Like, if I did an inspection at a park this year, and then I'm not doing it next year and I know that James is going to do it, I'll call James before the inspection and say, "hey, be sure to look at this, this and this. I found that last year". We share that with each other.

B: We started having quarterly meetings with, um, with the group and coming in and talk about, you know, the different problems that we run into and the best ways to approach them and how to handle them and working on, you know, improving our check-lists and guide-lines on how to inspect and then helping the industry, you know, communicating that stuff and then we actually started, last year, having summits with the industry to bring them in and, kind of, telling them what we're looking at and what we're looking for and then, how, how can they help us on our side as well. So, we have a pretty good open line of communication, I think, between, you know, all the folks involved.

M: So, oh, wow. So, you, you actually have meetings with the industry as well then?

B: Correct.

M: Oh, fantastic. Brilliant. Um, how often did you say that was, sorry?

A: Um, right now it's annually. So, and again, if an individual company wants to come in and talk to us, or call us or email or whatever, you know, we deal with them on a case-by-case and then we have a summit each year and we do that for each program.

M: And what's the response been like for that, so far?

B: We had a pretty good response last year. 20, 30 people. We had 20, 30 people turned up. It was, it was a little less than our expectations, but, um, pretty good crowd nonetheless.

M: How many, um, just out of curiosity, how many parks do you have in your state? Do you know?

B: Permanent parks... focussed just on the aerial adventure?

M: Yes, please.

B: 5 or 6 and one in the process of being built.

M: Oh, fantastic. OK. Yeah, sorry, I didn't mean to put you on the spot there.

[Laughter]

B: You're fine.

M: Um, OK. So, you have your meetings externally. Do you have staff meetings as well, internally, did you say, or...?

B: Yeah, we do like a quarterly safety and then, you know, I'll go over some safety copies with the group and then, um, we'll talk about stuff that's hindering our inspections or we'll talk about something that, maybe, one inspector is doing that we all need to be doing and, um, my goal is, um, to have everyone inspecting in the same manner that the senior inspector would be doing. So, you know, we spend a lot of time talking about how he goes about the inspections and different things of that nature.

M: Um, so, so how important would you say that this information sharing, um, internally, how important do you think that is, um, for you to inspect parks and so on?

B: In order to get a standardised inspection it's vital, in my opinion. I, I think if, um, you've got 6 inspectors doing 6 different things, you've got 6 different inspection styles. If you're having these meetings and communicating with each other on how you're doing these

things, you bring them a lot closer together and your standardisation is a lot better, so you're, so you're looking at similar things, you know what I mean?

M: Yeah. And, um, how, um, what role does leadership play in effective risk management, for you guys?

A: Well, I don't think your workers can be better than their leader. Like, a good inspection starts at the top.

B: Yeah. Expectations. You know, make sure they're defined. Communication. Um, not treating like they're just another number. You know, just relations. I just think, personally, all of that's important.

M: Brilliant. Brilliant. Um, now looking at, um, I guess, the industry in general, um, how do you believe that an incident at one park might affect the rest of the industry?

A: I think if you had a bad accident at one park, it could maybe scare people from going to other parks for a while. I mean, just to use, basically, the whole US as an example, I know last year we had numerous amusement ride-related incidents throughout the country in, um, Tennessee, Kansas, um, Texas, North Carolina. I think they're the ones. They're very publicised and, um, the news will pick them up locally, and as soon as they pick them up locally, they're in our office probing us on, you know, how we do things and, um, so, you know, that, you know, helps us stay ahead of the game, because, you know, we're trying, here in [intentionally left blank], we're trying to prevent every accident that we can. So, we're, you know, as soon we hear something like that, we're seeing, you know, we're understanding what happened there and then talking to our owners here and trying to help them avoid that stuff. I think our state fairs, when they come in, they say we're one of the better states that they come into, as far as the as the safety inspectors and the relationships and, you know, and how we take care of business and how we take care of them. So, you know, compared, compared to other states, they rate us pretty high.

M: Wow, that's, that's really good, that's really good to hear. Um, so, and, um, you said already how you have the annual meetings with the industry. Um, are there any other means, um, that you collaborate with industry?

B: Um, we'll have our commissioner, deputy commissioner, myself, um, senior, we'll go out with the inspectors on different times, different places, you know, kind of, observe the inspection, meet the people at the park and, you know, like, this year we had a permanent park we went out to ahead, ahead of inspection to just, kind of, help them and us get on

the same page on how we'd like to see the inspections go this year to try and improve the process. So, we do different things like that throughout the year.

M: Um, OK. Now, do you, um, do you work with the standard with the standard writers as well, um, like the ASTM, do you communicate with them at all, or?

B: [inaudible] with ASTM? With ACCT?

A: No.

B: We have a, um, a park here in town, or we have a manufacturer called [intentionally left blank], he builds, he builds a lot of these adventure parks around here and other states and we do have a, a direct line of communication with him and he has shared a lot of knowledge and lots that we've learned, we've learned from him.

M: OK. OK. Um, and how do you try and implement then, this knowledge that you've learned from, from this guy?

B: Yeah, through those meetings. That's how we communicate with the other inspectors. You know, if the permanent parks have some, some opportunities that we can come out for training and stuff, they'll invite us out and see stuff, you know, and that we haven't seen in the past. When they have something, you know, completely taken apart, we'll go out and get some knowledge on that. So, you know, we just try every avenue that we can. And, we also have, um, the NAARSO training, um, I can't tell you what that stands for...

M: No, no. That's OK.

B: [...] National Association Amusement Ride something...

[Laughter]

B: We have our guys, we, we, every two years our guys go down there. We've got 3 or 4 down in Florida right now doing training.

M: OK. Cool, OK. Wow.

B: So, that's a, that's a national thing, so you've got inspectors from all over the country there and they're, you know, they've got some pretty, um, top-notch... constructors that are communicating, you know, nation-wide examples and desires and guidelines and stuff of that nature. So, once they go to that, they'll come back and bring that information back and then we'll have a meeting, you know, at some point and communicate all that.

M: OK. OK. Um, do you, do you, um, do you collaborate with other states or, or how does that work, sorry?

A: We, we, when we go to our NAARSO meetings, we'll talk with other state inspectors and find out how they handle, how they handle certain situations and I have called and talked to other inspectors on the phone before, getting their opinion on different substance.

B: If there is a question about something in our law that doesn't really work right, we'll research other state-laws and see what they're doing and if what they're doing will improve what we're doing, you know, we'll, kind of, take some of their verbiage and, and try to work it into our stuff. So, we do do something like that. We're not necessarily on an island out here, but...

[Laughter]

B: [...] we have a lot of, um, impact with other states.

M: Um, oh, for sure. No, I get that. Um, I mean it must've been a little bit of a learning, um, learning curve as well, um, to jump into this new industry, um, for you guys as well, huh?

A: Oh, yeah.

M: Yeah. Now, as you're looking at the industry itself, do you see any collaboration taking place within the industry at all?

A: Yeah, I think, I think the park owners, they, they talk with each other, um, and, and I think they collaborate quite a bit. Um, and then they collaborate, you know, like the builder, [intentionally left blank], I'm sure he collaborates with different show owners that then go, like, "hey, this guy built this", and, um, I think there's a lot of collaboration.

B: Yeah, I have one example of that collaboration: one of our permanent parks here, they have a guy in Canada right now helping out, because they were having some problems with a ride up there, so they sent him up to... so, yeah, there's definitely collaboration going on.

M: Oh, OK. Fantastic. Um, and do you, as um, at the state, do you attend, um, any industry conferences, specific for the aerial adventure industry? Like, the ACCT conference? Or ASTM?

B: No, we've never been to any ACCT conferences. Um...

M: OK. Um, so, looking at collaboration, what do you think are the benefits, then, um, to collaboration? I guess, specifically, between you and the industry.

B: Oh, I think collaboration is good. I mean, the more knowledge you can get about something the better, the better you are. So, I think it's important. The communication and collaboration helps, you know, open lines. Like you said, we had a learning curve, so there's stuff they may be seeing that we're not, you know, and the communications and meetings they'll bring those things up and that'll open our eyes and, kind of, force us into some additional training and stuff of that nature. So, you know, I think, the idea, you know, it brings ideas into picture and helps us do our inspections and it improves our relationships.

M: Yeah. Um, I mean, would you describe it as a, as a, um, a pretty tight relationship in [intentionally left blank]? I mean, if you've only got 5 or 6 parks, um, do you...

B: Well, we have 5 or 6 aerial parks. We have a bunch of other stuff that we inspect, but, yeah, I think the relationship is, probably, 85 or 90% of very positive. You know, there's always going to be some out there that don't like regulation, that don't like government getting into their business. You know how that works.

[Laughter]

M: Yeah, of course.

B: And we're a pretty redneck state too!

[Laughter]

B: So, we're definitely a little bit more [inaudible].

A: To answer your question from before on NAARSO. What that stands for is National Amusement Ride Safety Official.

B: There you go!

M: Fantastic. Thank you very much. Thank you. It seems to me, like you said as well, that a lot of the states are, are, you know, having a lot of their inspectors trained to that standard, which is great, of course. So, that must be a, um, a great tool for you guys to communicate with other states, like you said.

A: Yeah. There'll be, there'll be, um, there'll some other states, there'll be people from other countries. Yeah, it's a pretty big organisation. I think they've got over 500 people this week, um, um, that's what I was told. And, um, a lot of people go every other year, so, next year there might be 500 completely different people there.

M: Wow, yeah. For sure. So, um, would you say, um, are there any drawbacks, um, as far as, as far as you're, you believe, um, to collaboration?

A: I don't... I can't see any drawbacks to collaborating.

B: The only drawback I can see from, you know, collaboration and meetings and stuff is when everybody comes to the meetings with problems and nobody, you know, talks about or tries to, you know, disseminate solutions. I, you know, if you want to frustrate me, that's the best way to do it.

[Laughter]

B: Start throwing problem after problem after problem at me without even thinking about anything beyond that problem and how you would, um, solve it. You know, so I, I'm definitely a solution-based person and I want to, that would be my only issue with collaboration.

M: Yeah. Do you find that happens sometimes? That they turn up just to.

B: Oh yeah.

M: Oh, wow. OK. OK. I mean, I have to say, from all the states that I have spoken to, so far, um, you're one of the few ones that actually invite industry in, um, to sit down and chat to, um, so that's a really great approach, um, to it.

B: Yeah, I think we have a different mind-set. You know, a lot of government regulators are, you know, you point and they're supposed to jump and I don't, I don't think we're supposed to operate like that. We're, you know, in my opinion, we're a second set of eyes, third set of eyes, everyone looking at it, you know, we're helping them, you know, cover their liabilities and helping them stay safe. So, you know, we're holding them to a certain level of regulation, of course, but, you know, we're also here to help them.

M: Yeah, of course. That's brilliant. Because, I mean, you've both got the same objective, right? To keep people safe.

B: Correct.

M: Yeah. Um, so what do you think, then, is required for collaboration to work?

A: I think you've got to, you know, trust, individual skills, right setting, um, you've got to trust who you're cooperating with and they've got to bring something to the table.

B: And you have to build trust. You know, you have to earn that trust and that goes both ways. We have to put our best efforts out there so they trust us and the other way goes as well.

M: Um, and how do you guys go about building that trust, sorry?

B: Just try to mean what we say, say what we mean and do what we say. You know, if we're, if we're going to be there at 9 o'clock I expect our inspectors to be there at 9 o'clock. You know, if we're going to hold them accountable for something, you know, they know we're going to hold them accountable. It's not, you know, it's not, "maybe today we'll hold you accountable, tomorrow we won't". You know, when we come out there, no matter what inspector it is, it ought to be the same way, you know. I think, you know, this communication, having them into our office and, um, I think last year we had an inflatable here at the office and, um, had meetings and went through an actual inspection and, you know, different things like that. You know, I think the more we put ourselves out there to help them, the better they will trust us.

M: Fantastic. Um, and so, do you think that, um, does the industry share this, um, trust with you, um, as far as you're concerned? Especially, the aerial adventure parks.

A: I think they do. I have, I haven't gotten any negative feedback.

B: I think we had some issues last year with, um, a church camp that, they just didn't know and they weren't sure how to, you know, obviously regulation and, you know, the environment, so, they might have had it in their back of their heads that, you know, we're government and we're going to come down there and pick on them. So, we, kind of, took it at, at an angle. We had our best inspectors, you know, our senior inspectors, you know, and our manager at the time went down there to assure them that's now what we're after. You know, so it's just, I think it's the approach and how you take it with the different individual. I think, you know, last year, we took a pretty positive approach and it actually turned out to be a pretty positive relationship in the long-run.

M: Oh, excellent. Wow. OK. Um, now, and you just mentioned as well, the, the church camp and so on. I mean, a lot of these operators are, um, small-to-medium enterprises. So, um, how do you believe this may impact collaboration, I guess, between you guys and within the industry as well, because, obviously, they have a, um, they don't have a lot of time and they don't have a lot of money neither, generally.

B: Yeah, it's just working together. I just answered an email to one that, you know, we'd put out some new guidelines and requests this year and they're, you know, concerned about the financial impact of that and, you know, I basically, from my point of view, we're going to help them. I don't want to create a money issue, just want to work with you and we'll help and do our part as well to try and get our requests accomplished. So, I... just like I said a while ago, it's not trying to run anything with an iron-fist, you know, it's just understanding that this has to be a relationship.

M: Right. Right. OK. Um, and so, do you think, then, um, for the industry, um, would it be beneficial to create something like an industry-body that focussed purely on risk management? Um, you know, it could be purely through the ASTM, but, kind of, as a forum, almost, um, for the industry and the states to really communicate what they learn, between each other.

A: I think that NAARSO is, um, impacting that pretty dramatically.

B: Yeah, I think that, that there's pretty much already something in place that, um, drives that.

M: OK.

B: Yeah, I think they're down there. You've got inspectors from every state talking about the problems that they deal with every day. You know, and then Fred from North Carolina says, "Hey man, this is what I do" and you're like, "that's a good idea". So, now you've got thirty or forty states walking out of there with better ways to do things, you know.

M: OK, yeah. That's a good point. That's a very good point, actually.

B: So, I think NAARSO, I think the, the businesses actually send representatives at NAARSO too, right?

A: Yeah.

B: So, you'll have, like, you know, some of our parks who will have a NAARSO inspector that's there with us, so they're getting a similar training to what we're getting. Or, the same training, I guess.

M: Oh, really?

B: Yeah, so I guess, I think, that's a good opportunity. You know, they learn what we learn, so they know what to expect when we get out there. And, like I said, the bigger, the bigger

parks, we have communication with them prior to the inspection and try to communicate, you know, our expectations ahead of time, so we're not surprising anybody.

M: Is that, um, is that something the state is funding or is that something the individual businesses have chosen themselves to go with you?

B: Um, the state. You know, that's something we've just started here recently.

M: Oh, that's brilliant. Um, and that's something you're likely to continue with as well?

B: Absolutely. I think it's, to me, like, I said a while ago, a relationship is the biggest, you know, the biggest mover of our business. You know, how we go out and deal with people and their understanding and trust of us. You know, if they don't trust us and don't want us in their park, they can really cause us problems and vice versa. So, um, to me, the more we're communicating with each other, I think, the better things go when we show up on site. You know, I'm, personally I've not worked for the government that long, but, I remember, you know, I'm 47, so I remember a day when, when the government, you know, they're here to help and it meant something. So, we're trying to get back to that and, you know, here in America, it's gotten to where if hear from the government, you're like, "oh, no! What are they going to do today" and we're trying to change that opinion again. You know, we promise we're here to help. You know, we don't want to bring negatives upon you. We want to help you do better.

M: Yeah, that's really amazing that, um, that you invite them down to do the training with you as well. Um, did you say, is it one business or is it multiple that you've invited down?

B: Yeah, it's from all the areas of, of amusement, you know, that are in our offices, from inflatables to theme parks, to aerial adventure, you know, you name it, they're all invited.

M: Um, when you guys first went into the aerial adventure industry, did you face any, um, I guess, push-back from the industry, um, because you were new in the industry or how was that?

B: Yeah, I'd say we got a little bit of, um, I wouldn't say pushback, but, um, a lot of them had, like, [intentionally left blank], the man that builds a lot of those, the stuff around here, he would be there at the first inspection and, and he, he likes to, he explained some stuff... um, a little bit of resistance. But, it was good training for us for him to be there.

M: OK. And, so how important do you think that leadership is, um, for the, um, for the collaboration, um, to succeed?

B: Repeat that.

A: How important do you think leadership is for collaboration?

B: Oh, yeah. Leadership is very important. If you don't got a leader, um, willing to collaborate information, it's not going to work.

M: OK. And do you ever, um, just out of curiosity, do you ever see the, um, um, I guess, obviously at the moment it's mainly states that regulates, um, the industry, do you ever see that changing to a, um, a more local level or a federal level?

B: I hope it never goes to federal level. Um, I don't think, um, I don't think one wash-rag washes all bodies, know what I mean?

M: Right.

B: I think, I think you have different, um, types of amusement devices in [intentionally left blank] than you would have in California or New York. So, I can't, I can't, honestly, see a positive to any kind of federal, um, you know, similar to our OSHA, I just, I just can't see that being a positive impact on the parks. I think it would be very costly to them and, um, and that's just my opinion. As far as, you know, you talked about, like, cities and stuff like that, I don't know, do we have some cities that do any inspections?

A: We have a couple of cities that the fire marshal will come out. Like, if there is a travelling show, they'll come out and mainly just look at electrical. That's about it.

B: Pretty much the state of [intentionally left blank] and its state inspectors do all the amusement ride inspections.

M: Yeah, the reason why I ask is that, um, a previous person that I spoke to last, there was, um, it was, um, at a local level, I think it was a local council that, um, told him what he could and couldn't do, which I thought was quite interesting.

B: Right. Most of our... the, the local cities and counties and stuff like that understand that they don't have the training and knowledge of, you know, what they need to be looking at out there, so they don't really get involved. They do, um, double-check with us, you know, if certain groups are OK here and again, but beyond that they don't get involved in the inspection part of it.

M: No, that makes sense. Um, OK guys. I just have, um, a couple of more questions. Um, so, I know you're new to the industry, but, um, going forward, what do you think the future looks like, um, for the aerial adventure industry?

B: I think they'll probably peak in a few years and then they'll start to decline.

M: OK.

B: Maybe that's just wishful thinking, I don't know.

[Laughter]

B: I think, you know, as with all, you know, you get, people get tired of stuff, but I think, um, the, the permits behind some of these courses, these church camps, these trust camps, these, you know, military-related camps, different things like that, I think, you know, to me, they're going to be around for a time and, um, just because people like to do stuff like that, you know, once a year, get out and go spend a weekend somewhere and get away from the house and do something challenging, you know, especially us old guys, you know, we have to get out every now and again. But, um, I think they're going to be around for a while.

M: OK. And do you, do you see, um, a lot more popping up in, um, [intentionally left blank]? Because you said you had 5 or 6 and, um, a new one being built as well.

A: Um, I don't really see them building very many more in this state.

R: You can't saturate the industry with too many, because then...

B: [...] none of them will make money.

M: Yeah. No, no, yeah. Um, OK.

B: We've got some pretty scenic areas, you know, they're popping up around, so there's a little bit of, um, you know, you get to see some waterfalls and different things like that, you know, when you get on your way to, or you can stop by on the way when you're leaving. So, you know, there's some motivation to where they're building.

M: Um, and so, um, obviously, the industry has seen a lot of, um, innovation at the moment, in terms of safety gear and so on, um, like the smart belays, I'm not sure if you've heard of them and so on, um, but yeah, what kind of changes or developments do you, um, foresee happening, um, as well over the next few years?

B: I'd like to see, you know, more IT-related technology, you know, being involved in our inspections. You know, I think it would save, you know, the wear and tear on the inspectors if we used, you know, an example would be, if we used drones for some of our inspections or something along those lines. But, I would definitely like to see IT, you know, getting more involved in our stuff.

M: Yeah. That's certainly something I'm seeing in the, um, in the industry already, in terms of how they inspect their own courses with tablets and, um, God knows what nowadays, yeah.

B: Yeah. I think if they look, if the amusement industry would look at the oil industry at how they do inspections and, um, different things like that, and their maintenance, I think they could get some good technologically-advanced ideas on how to, you know, improve some of the amusement-related stuff.

M: Um, out of curiosity, how do they do it in the oil industry?

B: Well, just some example, like on pipelines, they'll put something what they call 'the pig', inside the pipeline and it goes through and it X-rays and it scans, it does different things to the pipe while it's going through it, you know, and it checks all the metal. So, it's basically like a high-speed NDT, you know, non-destructive-testing. So, and they... you know, there's a lot of things of that nature that they're doing out there to make sure, because there's such a, you know, call for drilling in, um, the early, late, early 2000s and then it, kind of, dropped off in late 2010, so they had a pretty good bump in oil, um, production and natural gas production so technology, you know, was just running rampant and they were pulling all the engineers out of college into the oil field.

M: Yeah? Wow. OK. Yeah, um, I certainly think that technology is going to, um, or, I hope so, like you guys, technology is going to, um, help the industry a lot over the next few years. Um, but listen guys, that's all I, that's all I really have. Um, I hope I haven't taken up too much of your time.

B: No, you're fine. I hope we've been a help to you.

M: Yeah, very much so! Do you have any questions before we finish or?

B: I do not.

M: OK.

B: If you need anything further from us, you have my email and my phone number, so don't hesitate to contact us.

M: I do, yeah, so thank you very much [intentionally left blank], [intentionally left blank] and, um, [intentionally left blank] as well, yeah, thank you very much guys and you have a good day!

A: Good luck!

B: Good luck on your PhD, buddy!

M: Thank you. Thank you very much. Bye-bye now.

B: Bye.

Call ended.

Participant 15 Conversation

B: Participant M: Me

B: Hello, this is [intentionally left blank].

M: Hey, [intentionally left blank], it's Marcus Hansen, how are you doing?

B: I'm good, Marcus, how are you doing?

M: I'm good, good. Is this a good time?

B: Yes, this is a great time.

M: Oh, fantastic. Fantastic. Um, how's your day been? Busy?

B: It's been great, it's been great. Um, getting a little rain here today, so, um, not too bad. Now, where, where are you calling from now?

M: Um, I'm calling, from, um, Nottingham in the UK. So, um, Robin Hood country or world, if you like.

B: Yeah. So, what is, um, what's the temperature like over there right now?

M: Um, I think it's probably about, um, it's probably about, well, in Fahrenheit, it's got to be about 55 Fahrenheit or something like that.

B: Yes, OK.

M: Yeah, so it's, it's decent. I mean, I went out for a bike ride today and it was a good temperature for a bike ride, that's for sure.

B: Yeah, that's very good. Very good.

M: Um, do you get snow where you are?

B: Um, we do get snow where we are. Um, not, not a lot. I think we've only gotten one decent snow so far this winter, which accumulated to about 8" or so, but that's about it.

M: Oh, OK. Well, 8" that would stop the UK completely!

[Laughter]

M: Yeah, Heathrow is closed, that's it. Um, right, well, [intentionally left blank], um, thank you very much for participating in my study. It's very much appreciated. Um, I just want to

run a couple of checks through with you, um, before we start. Basically, I am recording the call and I'll send a copy of the recording to you after we've finished tonight, or this afternoon, um, and, um, I will send a copy of the transcript to you as well, once I've transcribed it, um, which will probably be in a couple of weeks, I would've thought, um, and basically, it's, it's all confidential, like I explained to you on the email, um, any potential identifiers, I'll edit them out, so, you know, you don't have to tip-toe around, um, the company name or what state you're in or whatever, I'll sort that out, don't worry about it. Um, and that's basically it. Um, the flow of the interview, we'll have some general, basic questions, then some questions on risk management and then some questions on collaboration. Does that sound OK?

B: OK. Yeah, perfect.

M: Cool. Do you have any questions before we start?

B: Um, I don't think so. Not at this time.

M: OK. Cool. Well, um, yeah, let's dive right into it. So, um, please tell me about your role within the organisation.

B: Um, yes, so I work for [intentionally left blank] Insurance, um, and we, um, [intentionally left blank] Insurance is a larger organisation, however, within my team, um, the team I lead, what we do is we focus on insurance and risk management in the adventure sport industry, um, and predominantly in the zipline and aerial park industry. Um, so it is our job to, um, work with ziplines and aerial parks in helping them to create an insurance solution, um, for their operation and then also work with them on risk management and risk management consulting to help reduce, um, the incidents that they have, um, the frequency of the incidents and then also the severity of the incidents, um, through risk management consulting.

M: Oh, wow. So, you provide more than insurance, essentially?

B: Um, yes, we do. We, um, I would say that it's probably our greatest differentiator from our competitors, um, because most of them just provide a product, where we provide, um... most of our clients see us as their outsourced risk management department.

M: Oh, wow. Fantastic. Oh, brilliant. OK. I wasn't aware of that. Wow, OK. So, how long have you been, I guess, you, yourself and the organisation, how long have you been involved in the aerial adventure industry?

B: Um, we've been, myself and the organisation, I brought the organisation into this industry, um, and we've been in this industry about 4 years now.

M: OK. OK. So, um, do you have a background in it, [intentionally left blank], or what made you, um, take that jump?

[Laughter]

B: Um, no, not really. It was, um, I've always, I've always enjoyed the outdoors, um, and the adventure industry, um, and we... we, essentially, stumbled upon an aerial park, actually a builder of one and realised the opportunity in this industry and how under-served the currently industry is, or was, um, and then just exploited that opportunity and really, um, learned the industry from ground up, um, meaning that I've participated in, you know, Level 1 ACCT certification training, um, um, just a... we just really became a student of the industry.

M: Wow, OK. So, you really are quite hands-on then, aren't you? Aren't you?

B: Um, yes, we are. Um, we are very hands-on, but the single most... the one sentence that tells it all is that, you know, we don't want to be an insurance transaction. Um, we want to be a risk management relationship with all our clients.

M: Yeah, I mean, just from you've what you've just said now, I mean, it sounds like you do more than some states do, I mean...

[Laughter]

B: Oh, yeah, I would completely agree with you on that!

M: Um, now, um, just out of curiosity, [intentionally left blank], you said it's quite un, un, under-served on insurance, the industry. I mean, I have a background, myself, in the US, and when I was there, it was, kind of, only [intentionally left blank] that was there, so are there other ones than that now, then, or?

B: There are either, number one, [intentionally left blank], or either us and that's it.

M: OK. Oh, OK.

B: And, that's the only two players in the industry, um, and it's just, um, over the past four years we've seen a natural migration, um, of the, the courses that are... the people that are larger, the elite, more elite courses, the courses that value risk management, kind of, have naturally migrated towards us. Um, and then, the people who are focussed on, um, nothing

but cost and then also, you know, they have naturally stayed or migrated with, um, [intentionally left blank].

M: Right, OK. Yeah. Yeah. Well, um, by the sounds of it, um, they get a little more bang for their buck with you guys, so, um... Um, and so do you do commercial operations only, or do you do the educational as well or?

B: We, typically, stick to the commercial operations. Um, mainly, because, for the services that we provide, there's not enough premium in the educational operations, um, to make it worthwhile for us to invest so much time in them. It's just, um, if we did that for the whole educational industry, we would not be profitable. We can't afford to do that, unless we charge some kind of extra fee.

M: Yeah, well, I guess, with the commercial side, it's growing so fast as well, that you've got enough on your plate anyway.

B: Exactly. Exactly.

M: Um, and so, what do you think, then, [intentionally left blank], in your opinion, what is the key attraction to these parks?

B: What are the key, what?

M: Um, the key attraction.

B: So, why are people coming to these parks, is that what you're asking?

M: Yes, yeah, yeah.

B: Um, I think the key attraction is, um, number one, the unknown of, these are new, um, number two, I think it's the, the adrenaline and the adventure. Um, the adrenaline rush and the adventure doing something risky, um, which that statement right there just... compliments why a relationship with a risk management consultant is very important.

M: Right. Yes. Um, how big a role do you think that plays? The, this, kind of, this thrill-seeking or the risk taking. Um, how big a role does that play in the overall attraction?

B: Um, I, I think it's huge, um, because, if these were just... extremely safe, not up in the air, um, you know, stuff on the ground, it would not draw, it's not as adventurous, it's not, it doesn't all the crowds as doing something 50 feet up in the air, that's just crazy, "it's pushing me out of my comfort zone".

[Laughter]

M: Yeah. Um, yeah. Would you agree, though, that when done right, it is, it is more, for the customer, it's more a, um, a perceived risk or an illusion of risk?

B: Um, yes, I would, I would completely agree with that, um, especially on aerial parks with the, you know, the smart belay technology that has evolved, um, that prevents the double-detachment and all of that, I would completely agree with that.

M: Yeah. Um, and just out of, again, just out of curiosity, um, because you just mentioned the smart belays, do you offer discounts for people that go for the smart belays, rather than the double-lanyards?

B: We do. We just created a program called our SOAR, S-O-A-R, our SOAR program about six months ago. Um, and, and what the SOAR program is, it's, kind of, the elite program in the aerial park and zipline industry and if you're in the aerial park industry, to get into that program, you have to be using either, number one, a, um, a continuous, um, belay system, meaning a Saferoller or a Koala System, um, something like that, or, either a smart belay system that prevents detachment, such as the Bornak system.

M: OK. Yeah. Do you have, um, do you stipulate which one they use or is it just any smart belay?

B: Um, we, we prefer the Bornak. For example, we, we don't like the Edelrid, because, honestly, the Edelrid reduces the likelihood of double-detachment, but it does not prevent.

M: OK, yeah, because you can just clip the, um, pulley inside, can't you. Um, yeah.

B: Exactly. It's not, it's not like the Bornak, where you have to be hooked on the line in order to use the key.

M: Oh, I see, yeah OK. I get. Um, OK. Um, so in terms of risk, then, [intentionally left blank], um, how would you define risk?

B: Um... I would define risk as... Oh, gosh... the greatest risk is the unknown. The greatest risk is the unknown, um, meaning, um... or ignoring something that is out there. Um, the, the... risk, by definition, I guess, um, there's a chance of loss, whether it be, um, property or whether it be a life or whether it be somebody getting injured. Um, that's the chance of loss.

M: OK. Yeah. And, um, how does, um, because, obviously in the aerial adventure industry, they have, um, they have an interesting, shall we say, interesting relationship with risk, right, because there is this part that the customer wants this 'dare', but at the same time the operator or the builder, um, you know, they want to provide that dare, but they don't want the actual, um, risk to be there, if you like. Do you think, um, that, kind of, affects the definition of risk, um, to a certain extent as well, looking at the industry as well?

B: Hmm. Now, say that one more time? Explain what you're, what you're actually asking there again.

M: Yeah. Um, what I'm trying... um, what I've found in my research is that, um, that there is, um, an interesting relationship with risk in the industry, because you have the customer that wants to experience that thrill, but obviously doesn't want to get hurt and the, um, the builder or the operator, um, want to provide that thrill, but, again, doesn't want the customer to get hurt, so, is there a, um, is there a likelihood that risk is also, almost, like a dare in the industry as well? Do you think?

B: I mean, it's, it's completely a dare, um, but I think risk is inherent in this activity in general. Um, risk is inherent in being 40 feet up in the air, um, going across a, you know, a cable, you know, that is the inherent risk. Um, it is our job throughout the industry to... control this risk as much as possible, because, honestly, from the participant's perspective, using a Bornak system versus using a regular carabiner system, um, means nothing to them. They don't, they don't know the difference, because they are so uneducated in this industry. Um, they're not going to see that, because the course is using just a double, you know, just the traditional carabiner system, that it's more risky and more fun.

M: Yeah, that's right. They don't, um, to them, um, yeah, it doesn't, um, mean anything, yeah. So, what do you think are the key challenges that the industry faces in risk management?

B: What was that again?

M: I'm sorry, [intentionally left blank], what do you think...

B: That's fine.

M: [...] what do you think are the key challenges that the industry faces in risk management?

B: Um... I think the key challenges that the industry faces is the evolution of the industry. Um, and the development of the industry. Um, it seems like, because this industry in the US is so new and it's growing so rapidly, everybody is trying to get the next step and do the next thing, the next better thing. Um, whenever it was in the zipline side of things, everybody was trying to see, "OK how much longer of a line can I have than the previous person?" and now the aerial park industry is, you know, like, "how big of a course?" "How many elements can I create?", um, but that brings new risks, new unknown risks, because we're venturing into new waters and territories that we've never been to before.

M: OK, that's interesting. So, are they making the courses more challenging, as such, for the participants? Or what are you referring to?

B: I don't know that they're necessarily making the courses more challenging, because, in my opinion, once you breach a certain level of challenge, um, you almost narrow the market potential of people that come to your course. But, I would say, you know, instead of them having 50 elements on the course, people are now going for 60 or 70 or some people have 200 elements on the course.

M: 200?!

[Laughter]

B: Yeah.

M: Wow. That's massive. That's big.

B: Yeah, there's one in, um, there's one at the Adventure Park at Sandy Springs, um... has over 200 elements on that course.

M: Wow, OK. Wow. So, um, how do you think that innovation has affected risk management for the industry?

B: In general, in a positive way. Um, and mainly what I'm referring to there is the technology in the smart belay systems. Um, you know, that is definitely innovation over just having a traditional carabiner system. I think it, I think innovation has, um, made the industry safer, especially whenever you're sending through, you know, these large throughput commercial operations, whenever, you know, some of these courses may be sending through 80,000 people a year, um, and spread out over 200 elements, you can't physically have your hands on every single participant through the course, making sure that

they're doing everything correctly, um, like in the old days where we would have traditional carabiners. So, innovation has, has definitely been a good thing.

M: OK. Um, do you think it brings, brings challenges as well? As people have to update their, their, um, change their way of operating?

B: Yes, um, because, any time you're having to learn a new procedure, um, there is a learning curve there. Um... you know, take for example, if you, if you've been operating your course for 5 years on a traditional carabiner-system, you, you know, you know the ins and outs of everything, but if you switch to the smart belay system you've got different challenges. Um, for example, if your guys are using the Bornak system versus the, um, traditional carabiner system, they can't unclip and move throughout the course as quickly. So, responding to an incident, because now they've got to use the Tweezle, or the little key every time they want to, kind of, go from one element to the other. They can't just clip, clip, clip, clip, clip, clip, clip, like they could with the traditional carabiner of course. So, you've got different things like that that you never expect or never foresee that require a little bit of a learning curve.

M: OK. OK. Yeah, I'm just trying to see, you know, um, both sides, I guess, but, yeah, there's no doubt innovation, I mean, there's so much happening in the industry as well. I mean, I left the industry about 4 years ago, um, and since then the smart belays are everywhere now.

B: Oh, yeah. Yep.

M: Um, how do you, what, what role do you think that the human factor plays in, um, in risk management as well? You know, the human element, I guess.

B: I think it still plays a significant role, but I think it is a changing role. Um, it is transitioning. You know, previously whenever we had just traditional carabiners, um, and in the old high ropes course and challenge course days, the whole experience was built off of human interaction, but, but now, um, with the increase in innovation and technology, it's not so much built off, um, human interaction, because you've got the smart belays. Um, however, as it relates to risk management, I still think, for example, human perception plays a huge role, um, number one, on the participant side. Um, where have they done an aerial or zipline park before? Has it been in Costa Rica, where, um, they have no regulations and they don't care if you go upside down in a waist-harness? Um...

[Laughter]

B: [...] and, and now they're coming to your course here in the US, where that is simply not allowed or, um, but they think it's the same type of thing. You know, they think it's the same activity. They don't know the difference between ziplines in Costa Rica and ziplines here in the US. So, there's that employee, or that participant perception that plays a huge role on the risk management-side of things and that's where I think it's the operator's, and the guide's job, to, as soon as they step on the facility, you've got to manage their perception. You've got to manage their perception that this is a professional activity and that it's going, you know, that safety is the most important thing here.

M: Um, how do you do that, [intentionally left blank]?

B: Um, there, there're a number of ways that you can do that. Um, the first thing is having, in your check-in area, having educational signs, um, you know, participant, you know, rules of participation signs, um, you know, "you can only weigh in between this amount to go". Um, the second, kind of, way you manage, um, expectations and perception, is the person checking you in. Um, you know, you can tell when someone is, um, not in the right element, from a participant and, and addressing that. Um, but I think... the main point that you can manage someone's perception is at ground school. Um, at ground school, whenever you're teaching them how to use the course and everything, you know, just letting them know that this, this is a very inherently risky operation, um, and in order to ensure their safety, they need to make sure that they're, at all times, listening to the staff of the operation.

M: OK. OK. Yeah, no, I see what you mean. So, it's about the perception and the training of the participant, essentially, before they enter the, um, the, the, the course.

B: Yes.

M: Um, so...

B: And then, again, kind of... and I'll just touch on this briefly, but, kind of, on the flip-side of that human interaction, you've also got the employee perception. You know, how long have these employees been working there? Have they been working there for three years and they're complacent? And, they just, they think they can do this, um, you know, in their sleep? They can guide a zipline tour or... you know, we don't want the employees to become too complacent in their skills, the rescue skills or, you know, just running the aerial adventure park.

M: OK, yeah, that's interesting. So, um, yeah, you have to keep them on their toes, um, because, I mean, I was once told that, um, a lot of the incidents that happen are actually from staff complacency with themselves, um, you know, because, um, when we were all using the normal carabiners, back in the day, um, it was so easy to just unhook yourself, right, um, because, you're, you're not thinking about it, because you do it every day. Um, yeah.

B: You're exactly right.

M: Yeah, no, I'm thinking out loud, that's all, [intentionally left blank].

[Laughter]

M: Um, so, um, do you, do you, I mean, what types of risks do aerial adventure parks face then? Um, is it customers, staff and so on? Is that kind of the, um, the main risk area there?

B: Yeah, that's definitely the one that jumps out at you the most. Um, it is, is, is the... yeah, I think so. I think you could, I would agree with that.

M: Um, and so, bearing all this in mind that we've just discussed, what does effective risk management look like to you then?

B: Say that one more time. I'm sorry, I...

M: No, that's alright, [intentionally left blank], I do apologise. Um, what does effective risk management look like to you?

B: Um, effective risk management looks like an ongoing relationship. An ongoing process. A circle that never stops. It's, it's not something that you address at the beginning of the season, once a year. You're continually identifying the risks, you're continually assessing the risk, you're continually treating those risks and then you're continually monitoring the treatment of those risks, to see how they need to be adjusted.

M: And how do you encourage your clients to do that?

B: Our biggest our encouragement is "pick up the phone and call me!".

[Laughter]

B: Pick up the phone, call me, bounce ideas off of me. Um, if you're, you know, if you thinking about doing something different, out-of-the-box, um, pick up the phone and let's

have a 3 minute conversation about. Even if, you know, we both conclude that, “oh, yeah, that’s perfectly fine”, at least, at least you’ve got a second opinion on it.

M: Oh, yeah, that’s a good point. Um, do you, I mean, I guess, as an insurance company as well, um, are you looking for, um, things like, um, inspection documents as well, um, and what not?

B: We are. We look at the inspection, um, report, um, we look at their, their operating manual and procedures, um, we look at the number of hours that their guys were trained and whether it was done by, internally, by a staff or by a third-party, um, we look to see does the course have engineer-stamp drawings, um, you know, we look to see who built the course, um, what were their credentials, um, we look to see if they’re using a full-body harness versus a waist-harness. Um, those things that we take into consideration.

M: Are you trying, um, are you pushing for the full-body harness, rather than the waist harness?

B: Um, I’m, I’m a big fan of full-body harnesses.

M: Mm. Yeah, OK. And so, now, in terms of risk management, then, are you, do you think that it’s a case of, um, considering all risks together or dealing with them individually?

B: Both. Um...

[Laughter]

B: Say that one more time and let me think. Say that one more time.

M: Yeah, sorry. Um, are you looking for an, um, all-encompassing approach to risk management or an approach where you deal with risks individually, separately?

B: Um, I think the answer is that it’s both. I think you’ve got to, it starts with an all-encompassing picture and then you drill down to specific tasks or specific items and tackle those items individually.

M: Um, OK. Right. Um, and so, what role, or impact, should risk management have on the overall strategy, um, of an organisation? So, I guess, with your clients, um, how important, how important should it be to their strategy?

B: I think it’s, it’s got to be the number one, um, thing. Um, if you’re not managing risks correctly, you will not be in business for long. Um, and in my mind, and this is something we tell a lot of our clients, you’re in the business of risk management. It just so happens, it

just so happens that you also send people down a zipline or you operate an aerial adventure park.

[Laughter]

M: Yeah, that's very true. Very true. It's a good way of putting it, though.

B: I think, I mean, you think about it, they, they... definitely are. If they do not manage risk, they will not be in business for more than a year.

M: Yeah. Yeah.

B: They're insurance premiums, alone, will drive them out of business.

M: So, um, how do you monitor, then, how do you monitor then that your, the clients are actually following these risk management procedures?

B: We go through a pretty, not pretty, a very detailed process before on-boarding a client, um, which is pretty interesting, that we are, we do not see ourselves as an all-commerce, um, program. We only want to deal with the elite people in the industry. Um...

M: Oh, OK. Oh, that's interesting.

B: Um, yeah. I would probably say we turn down 35% of the operations that we begin talking with.

M: Wow, OK. So, you're quite selective then, on who you take on-board?

B: We're very selective. Um, because, if you, we, we managed and designed an insurance program specific to the aerial park industry. Um, and we designed it for an insurance company and in exchange for us designing that program, they gave us exclusive rights to it, which means that nobody else can get to it. Um, but what it also means is that it's my responsibility to manage the profitability of that program and if we're just an all-commerce approach, um, we will blow up that program, um, because, if you look at this industry, on a whole, from an insurance perspective, the industry, in a whole, is unprofitable.

M: OK. That's interesting. Yeah, is that because of incidents that are happening and so on?

B: That's because this, this industry is somewhat small. Um, for example, if you think about the general liability premiums that are paid for all commercial ziplines and aerial parks in the United States, I would bet we're under 5 million dollars. And that's general liability premiums. Um, so what that means to the insurance companies is, um, they can only afford

to pay about 3.5 million in lawsuits out of that, because they've got to turn a profit, plus they also have overheads, um, I mean, there's their company to staff to pay. Just think. One incident...

M: [...] could top that.

B: One incident could wipe out that 3.5 million dollars.

M: Mm. For sure, yeah. How do you, do you know how, um, because one of the things, there isn't much data on the industry. Do you know how many parks are in your country? Um, zipline parks and aerial adventure parks.

B: Um...

M: Because, I've seen varying numbers. I've seen some say 450+, I've seen some people say around 200, um...

B: I would say... I would say, probably, closer to 400 is an accurate number.

M: OK. Yeah. That's interesting. Um, what do you think, then, if it's unprofitable, like that, obviously, you, you're quite selective, because of that. How do you think that, that the rest of the industry, how is that, um, affecting the industry long-term, do you think? What's going to happen?

B: Um... Long-term, number one, minimum premiums will rise, meaning, um, for the, you know, for the parks that do not, that are more educational-based, um, an insurance company will say, you know, the insurance company will say, "I don't care how many participants you send through. Our minimum premium, for any zipline course, is \$10,000. We will not go below that". I think those will continue to rise, due to the severity, just the natural severity of this industry, meaning one incident could easily be half a million dollars. Um, number two, I think we will see, and we're already beginning to see this, where churches, camps, um, their insurance companies, people more in the educational-based arena, um, are not willing to insure their zipline course.

M: They're not insuring it all?

B: They're not, because, they don't, they don't understand that risk and they don't want that liability and, and previously they've not priced appropriately for it.

M: OK.

B: So, and I'm talking about the insurance companies, not the actual camps. So, what that means is the camp has to go out and get a separate insurance policy, just for their zipline, which may be \$10,000 and they can't afford that, because they're a non-profit.

M: OK. Mm. So, they'll have to close then, basically. Um... OK, that's interesting. No, I didn't realise that, um, [intentionally left blank], um, about it being none, unprofitable like that. Um, so, now, between, you said before as well, that, obviously, if one of your clients is trying to do something new, you know, they can pick up the phone and talk to you. So, in, in general, what lines of communication exists between you and your organisation and your clients?

B: I would say, um, a majority of it is email and phone call and then a small portion of it is, um, face-to-face visits and training sessions. For example, you know, um, in a couple, you know, in a month and a half from now I am flying up to Alaska, um, to do a training a session for one of our clients in Alaska. Um, but that's in the minority. I would say the majority of it is email or phone call.

M: OK. Um, obviously, you're quite unique, um, because you do the consultancy-side as well, so I assume that probably brings you out on site, um, a fair bit? Or is it all over email as well?

B: Um, a lot of the consulting-side of things, honestly, is done via phone or email. Um, but we do do some training, um, we do do some training, that's correct, on site.

M: Yeah. Um, and so, so the knowledge that, um, you get from your clients, um, you know, things that they learn from operating the parks or building the parks, do you share that with the rest of your clients or is it, or how does that work?

B: Um... Yes and no. That's a very fine line.

M: Yeah.

B: Um, it's important to share general risk management information, um, it's important to share things that I have learned because of other peoples' incidences, but in the manner that I share it... they should never be able to figure out where that information, where that incident occurred at, or happened at or where that information came from.

M: OK. Yeah. Is that difficult, at times, do you think? Um, because, you know, major incidents in the industry, um, you know, we've heard about a lady that fell off in, I think it was in Delaware, everyone is going to know that that was in Delaware, right?

B: Yup.

M: Do you find that challenging?

B: It is very challenging. Especially, in a closed-knit industry like this. Um, but I think it's all about the way you communicate things. You know, we can't be going to people saying, "Oh, did you hear what happened to Go Ape in Delaware?", you know, "gosh, I can't believe they were so stupid to be using traditional carabiners. Better be sure you're not doing that?". Um, where more of the appropriate message is, "hey, have you considered a smart belay system?" you know, "did you know that one of the insurance programs that we offer incentivises you for switching to a smart belay system and using a smart belay system. Here, let me tell you why I am a fan of smart belay systems over traditional carabiners'. That's how that conversation happens.

M: Wow, OK. OK. So, bearing that in mind, then, [intentionally left blank], what role do you think, then, that leadership plays in effective risk management?

B: Leadership is huge, especially, um, whenever you're talking about the owner for the course. Um, you know, nobody wants to work for someone who's just, you know, bossy and doesn't care about anybody else's opinion. Um, no general manager is going to want to work for that person, therefore you're going to be scraping the bottom of the bucket and getting staff. Um, but if you're a very effective leader, um, if you're a very effective leader then people want to do the right thing for you, they want to work with you, um, in risk management and, and collaborate, um, on ways to do things better. It's more of a team environment, rather than everyone operating individually, because nobody wants to work with that person.

M: OK. OK. That's interesting. Um, so, do you follow specific standards in, um, as an insurance company, do you, do you say that they have to follow, I guess, ASTM or ACCT or, um, how does that work, [intentionally left blank]?

B: Kind of a general rule of thumb is ACCT for us.

M: OK. Now, how does, um, how do states, because, obviously, if you're in different, you offer insurance to different states, how do they influence that? Because, I know some states say it's got to be ASTM or something like that.

B: You know, for example, Tennessee, for example, they were ASTM for a while, but now they're getting ready to pass ACCT and, and if that's the case we're OK with that, but,

typically, um, our guidelines and requirements are always greater, um, than what the state requires.

M: Oh, wow. OK. Yeah.

B: So, the state guidelines, it's not like they're ever going to have go do more than what they're already doing with us to satisfy the state's requirements. If, you know, if they're with us and they're doing things correctly, they're already doing those things.

M: OK. So, um, looking at the ACCT then, um, have you, in order to meet your requirements, have you, have you gone above and beyond ACCT standards then?

B: Um, I mean, yeah. Um, I mean, in order to get on our SOAR program, I mean, you've got to have full-body harnesses, you've got to have, you've got to weigh every participant, you've got to, um, have a qualified course practitioner do all of your training. Um, all of those things are not necessarily ACCT standard requirement, but they're things that we say is necessary.

M: Um, OK. Um, is it, um, do you know how many states actually regulate the, um, the activity?

B: I think we may be up to 7 now. I know, Michigan just started regulating last week or two weeks ago. We're, we're, in some way, shape or form, we're still less than 10, I believe.

M: Yeah, it seems that the, um, yeah I'm surprised at how few it is though.

B: Yeah, but it's growing drastically, um, or quickly. Um, you know, the states that are...

M: Yeah and do you think that, are they, is it a case of them waiting for an incident to happen in that state before it happens or?

B: Yes. I would say that, definitely.

M: Yeah. So, how may an incident at one park, how may that affect the rest of the industry?

B: Well, here in [intentionally left blank], there was an incident at [intentionally left blank] where a 12 year old girl died, um, and out of that came a whole movement for regulation.

M: Um, OK, yeah. Is that the one where the ACCT went down and talked to the, um, the government about it or something like that?

B: Yeah, and we also formed our own association here in [intentionally left blank] called the [intentionally left blank] Aerial Adventure Association, which is essentially an association that is acting, we've hired a lobbyist and everything, to, um, you know, deal with all of that.

M: Really? Wow, I didn't know that. Is that something you're seeing throughout the country, that they're creating these, um, regional associations, as well?

B: Um, no. We were, kind of, the first at the time and now I think, kind of, um, still the first one out there.

M: Yeah, it's the first I've heard of it, but it's a really good idea.

B: Yeah, it's been a good thing. It's been a good thing.

M: Yeah. Um, wow, OK. Um, so, what happened then in [intentionally left blank]? Did the state decide to not do anything or?

B: Yeah, they did a study and they determined that, um, they really determined that the industry was already properly regulated and that they could not do anything to improve the regulation.

M: So, does [intentionally left blank] already regulate the industry, then?

B: Um, they do not. They do not regulate the industry and they affirmed that self-regulation is already occurring in a proper manner, meaning self-regulation through the ACCT, through insurance companies requiring inspection reports and all that type of stuff.

M: Yeah, because, essentially, insurance is, essentially, a type of regulation as well, isn't it? Because, you can't really operate without insurance.

B: It is, yeah.

M: Um, so, how, what's your relationship with the industry, as an insurance provider, then, [intentionally left blank]? Do you collaborate with the industry in general, would you say?

B: Um, we do. We like to, yeah, for, I mean, as you know, with Adventure Park Insider, um, we typically try to contribute to that on each edition. Um, we collaborate with ACCT. Um, we try to become a part of the industry and not just a vendor.

M: OK. Yeah. So, you would say that it's, you're not, so much, standing at the outside, looking in, you're trying to be, really, in there mingling with the industry, you know, being a part of it, yeah.

B: Exactly. We're, we're trying to be in there, in the weeds with them. That's exactly right.

M: In the weeds, yeah.

[Laughter]

M: Um, so, um, in terms of the industry, as a whole, can you describe any levels of collaboration taking place, currently?

B: Um, I think it's getting better, um, meaning the collaboration within the industry. However, this is still a new industry in which everyone's protective of their ideas, um, because they're still trying to gain that competitive advantage over one-another. Um, and so that is a barrier for collaboration, um but I would say the people, the more elite players, most of them realise the benefit of collaboration.

M: Um, yeah. Would you say, definitely, that this focus on competitive advantage, and so on, um, that that's an issue, when it comes to risk management?

B: Hm.

M: I guess, what I'm trying to say is, should you see another operator as a competitor, when it comes to risk management?

B: I don't think so. Um, I, I think, I think, for example, you and your competitor should have a, um, kind of, an exchange day, where your guys can go to their course, um, and go through their course and then their guys go to your course, just to see the different ways that you do things.

M: Is that something you encourage, because I actually think that's a brilliant idea, [intentionally left blank]?

B: I, I, it is something that I encourage.

M: Yeah, yeah. That would be amazing yeah.

B: That and then also doing an operational review. For example, the owners or managers or two locations. You know, for example, location 1, "go do an operational review for location 2" and then you flip that.

M: Yeah, I think that would be brilliant. Um, so, do you think that there... why... is that happening currently in the industry, do you think, then, [intentionally left blank]?

B: Maybe with 15-20% of the industry.

M: OK. OK. Why is it not happening more?

B: Because, people don't realise the bigger picture? Um, people don't realise exchange of ideas and information is a good thing and, honestly, if we exchange ideas and information, it's not like I'm going to take all your clients. Um, that's just not realistic.

[Laughter]

B: And, honestly, it's just, kind of, like the craft brewery industry. I don't know if you're familiar with the craft brewery industry, like micro-breweries here in the US, but that's an industry that feeds off each other, um, because they, they realised that people go, they hop from one to the other. Um, and I think the same thing is, somewhat, true about these aerial, aerial parks. People don't just go back and back and back to the same one. They want to try different ones.

M: Oh, OK. So, um, now, did you go to the ACCT conference?

B: Yes, we were there.

M: Do you think that's a fair representation of the entire industry there, or is it a, I don't know, a select group of people there, um? What's your thoughts on that?

B: Um, what, what's a fair representation?

M: What, what is a fair representation? Um, well, if we say there are 400 parks in the country, did you have more than 200 parks there, or?

B: Um, yeah, there was, um, 1200 people at the ACCT conference.

M: Wow, OK. Fantastic. That's brilliant.

B: I would say the majority, I would say 75% of the industry is there.

M: Wow, OK. 75%. Um, do you, um, is that, kind of, main place where the industry collaborates?

B: It is.

M: Yeah. Um, so, what do you believe is required for collaboration to work, then? Is it a case of, currently is it, is it just a lack of trust?

B: I think so. Number one it's a lack of trust. Number two, it's a sense of pride, um, because a lot of operations don't believe that anyone can do it better than them.

[Laughter]

B: Um, and I think if we would get rid of those two things and if we would trust people and be, be humble, um, then, then I think we could all learn a lot from each other.

M: And, um, but, I mean, a lot of these, um, so I realise that, obviously, a lot your clients are the, the, the, um, I guess, the bigger organisations, but a lot of the, um, stakeholders in the industry are the, kind of, small-to-medium enterprises. How do you think that, how do you think that impacts, um, or may impact, collaboration in the industry?

B: I think the smaller and medium ones are probably more open to collaboration. Um, just because they, they realise they are small and there's a lot of things that they may not know. Um, but I think, because there're so many of those that definitely increases the potential for collaboration and the opportunity for it.

M: Yeah. So, you think it's more the bigger operations that are more closed off? Um, and the smaller ones are the keen ones to, um, collaborate?

B: Yeah. The larger ones are all prideful, they're all, um, they're still looking to grow, they're still looking to grow rapidly, um, so they are pretty closed off.

M: So, how do you think, then, that we can motivate, um, these other stakeholders to collaborate, or participate in collaboration?

B: It's a good question.

[Laughter]

M: And I'm thinking, in particular, on risk management here, [intentionally left blank]. Um, it's on risk management, not, um, on everything else, just purely risk management.

B: Um, I think people, such as myself, may be the commonality for collaboration. You know, having a consultant, such as myself, that sees everything that goes on around the United States, but is not a competitor of theirs.

M: Yeah, OK. I mean, would you share, um, not confidential data, but risk management knowledge, if you like, um, with the rest of the industry? I mean, you have already done it in the Adventure Park Insider, right, so, but yeah, is that something you'd try and encourage as well?

B: Yes. I mean, we try, my philosophy is that my intellectual knowledge does me no good if it does not escape these four walls.

[Laughter]

B: You know, my intellectual knowledge is the one I know about risk management in this industry, is only as good, is only as good as it is in getting outside these four walls and getting [inaudible].

M: Because, one of the, um, things that I've come across, as I've been talking to builders and operators, it is, you know, what you've been saying, that, um, yes, they'd love to collaborate, but they're worried about, um, sharing too much, right, and, um, wanting some type of confidentiality and so on. So, one of the things that I've, that I've been thinking about, anyway, is that, well, what if it was through the insurance companies, because, you know, if there is an incident, for example, well, that organisation has to call you guys, whenever something happens, so you have the data anyway, um, um, so, and you can share it without saying that it happened at XYZ park. Just, you know, that, you know, um, you could share what you've learned, I guess. Um, does my question make sense?

B: Exactly right. Yeah, exactly right. Yeah.

M: OK. OK. Um, I mean, in the amusement rides they have, I think it's a magazine called Safer Parks, um, where they share information in there. It's all anonymous and so on that goes out to all of the industry. Um, do you think something like that would be, um, beneficial to the aerial adventure industry, or something like an industry-body that just has the sole-focus of improving risk management procedures within the industry?

B: Say that one more time.

M: Yeah. Do you think that creating something like an industry-body, um, that had a sole-focus of just improving, um, risk management procedures, um, within the industry? Um, would that be beneficial? Um, and it could be done, something like, you know, giving it information confidentially and then disseminating that back into the industry, you know, what we've learned.

B: I think it could be beneficial, yeah.

M: OK. Um, do you think it's likely? Is it something that's likely to happen, do you think? Um, something that the ACCT might put together? Like a committee, something like a safety committee?

B: Um, the hold-back there would be data. Um, for example, you know, myself and [intentionally left blank] we control a majority of the market place, um, for this industry and we all have data for each agency, or each company, um, but I'm wondering, you know, we're pretty, we're pretty proprietary of our data, um, just because I want to use it for the benefit of my clients.

[Laughter]

B: Um, you know, for example, I want to be able to send out something to my clients showing them a bar graph of where the incidents happened, um, by percentage. Does it happen on the platforms? Do they happen on collision with the trees? Do they happen on the nature trails? And I see that as a, a value that we add to our clients. Um, but that's definitely interesting, you know, on whether we would be willing to turn over data to the ACCT. That's, that's interesting.

M: Yeah, that's, um, that's what I'm wondering. Um, whether, um, because, like I said before, you guys sit on a lot of information, whether that's something you'd be willing to share with the rest of the industry, whether they're a client or not, um, for the benefit of the industry.

B: Yeah, it's almost, um, whenever I think of that, it's almost like, I would be more than happy to, yeah, it would, it's definitely something that I'd be willing to consider, that's for sure.

M: Yeah. OK. No, yeah, that's good. It's something that I've been thinking about as I've been doing the research. Um, I have to be honest, um, [intentionally left blank], when I first started looking at the research, insurance wasn't one of the stakeholders I included and then I started thinking, "hang on, all this data that I'm getting..." I'm thinking "well, it all leads back to you guys, the insurance companies", because, yeah, you sit on a lot of knowledge. Yeah, that's interesting, yeah. Um, and I hope I didn't push any buttons there.

[Laughter]

B: No, no. You're perfectly fine.

M: So, um, do you think, then, that the industry collaborating with public agencies, um, on risk management, is that something that would be beneficial as well?

B: I don't think the public agencies have enough knowledge about this industry to know what to do with it.

M: OK. Yeah. Um.

B: Like state agencies, regulatory agencies, um, I don't think they have enough knowledge or value-added things that they could bring to the table, um, about this industry.

M: OK, so when they, or if they go ahead and, um, or the states that are already regulating the industry, how do they affect the industry, as such? I mean, are you seeing that they are keen to work with the industry or is it more a case they look to you guys or the ACCT?

B: I think, I think, you know, they're easy to work with, but I think, you know, from what we've seen, it's, it's just a check-list. It's just them collecting their fee, it's just them saying, "OK the operation has insurance" and "OK the operation has an ACCT inspection report". They don't have the knowledge to actually look at that inspection report and know whether the course is doing a good job or not.

M: OK. Is that something [...]

B: So, it's more of a [...]

M: Sorry, go ahead.

B: It, it's more of a, um, a paper regulation in, in a lot of states.

M: Is that something you'd like to see changed? Is there a need for it to change?

B: I, I would rather, I would rather see the industry self-regulate itself. I'm a bigger fan of self-regulation within the industry and not having the need for state and government regulation.

M: Yeah. Yeah. I mean, if they don't know what they're looking at, anyway, it's kind of difficult to regulate it effectively, right?

B: Yeah, it's kind of like, you know, out in California, um, where they have to come and inspect the zipline. However, Johnnie that's coming, weighs 315lbs and can't get on the zipline to inspect it, because he's over the weight limit.

[Laughter]

M: Yeah.

B: You know, just things like that that happens.

M: I'm sorry, yeah, but that's comical, yeah.

B: Yeah.

M: Um, so, um, OK. OK. So, um, again, like we talked about on risk management, what role does leadership, what role does leadership play, um, in ensuring that collaboration is a success in the industry?

B: Um, I, I think, within the industry, it probably comes from the ACCT and has to be pushed from the ACCT downwards. Just the whole message of collaboration of, "we're in this together as an industry".

M: And, um, do you think it's an issue that, um, like the ACCT conference, for example, it's once a year, um, some people can't participate, um, because of the distance and because of the money, um, because of the distance and because of the money, do you think it would be beneficial for ACCT to do something like a, um, a regional conference or, um, as well, you know, more conferences as well? Um, online conferences?

B: Um, possibly, yeah. Yeah, possibly, but then, again the financials have got to be there to, um, justify that occurring.

M: Yeah.

B: From the ACCT's perspective.

M: Yeah, no, I was just trying to think of things to make it even more inclusive, um, because one of the things I've come across, [intentionally left blank], is that, um, some operators or builders are finding that they can only send one person, um, for example and then they're questioning the value of, um, just sending one person, um, to the conference. And so, I was wondering whether it would be beneficial to do something like, you know, more regular meets, um, you know bi-annual or something like that.

B: Yeah, that could be beneficial, yeah.

M: OK. OK. Um, well, um, I've only got one more question left, um, [intentionally left blank], and then, um, I'll get out of your hair! And it's, basically, just going forward, um, what's going to happen over the next 10 years in the industry? Do you think it's going to, um, continue on its growth, um, and so on or, how do you see it, um, changing over the next 10 years.

B: Um, over the next 10 years, I think it'll continue to grow, um, but I think we'll continue to see additional attractions added at facilities. You know, pure zipline parks or aerial parks

are adding bike parks, adding snow-tubing, adding, um, I think people will look to try to make this more of, their one zipline course, more of an adventure resort.

M: OK, yeah. So, diversifying.

B: Yeah, diversifying. Um, and I think we'll get to a point where we'll see some consolidation.

M: Oh.

B: Um, where we get to a point where there may be, you know, 1500 parks out there, um and maybe an investment company, or a private equity company comes in and buys 20 of these things and brands it under one park, or maybe some of, one of the larger players like Go Ape or Outdoor Adventure Group, maybe they start buying up additional locations. Um, but I think we'll start to see some consolidation.

M: Um, wow, OK. Is that something you're seeing already?

B: Um, no I don't think we're seeing it already, um, but I think we're getting to the point where, um, some of the people these zipline and aerial parks were people that were in, um, retirement that just had some cash and wanted to do something fun and get a good return on it and then they'll get to the point, probably pretty soon, where they'll need to get rid of this thing, or are already thinking of getting rid of this thing, and a lot of them, you know, the people, typically working under them as general managers don't make the type of money where they can just buy them out. So, there's no internal perpetuation mechanism, which means they'll have to externally to somebody.

M: Um, OK. That's all I have [intentionally left blank]. Um, thank you very, very much for your time. I'm sorry we took a little bit over than an hour, I told you it was only going to be an hour, but, um...

B: No, you're fine, you're fine. I enjoyed it.

M: Do you have any questions at all for me?

B: I think I'm good to go at this point.

M: No worries. Well, thank you very much, [intentionally left blank], and, um, like I said, I'll send a copy of the recording. Do you do Dropbox at all?

B: Um, yes I do Dropbox.

M: OK. I'm finding that's the easiest way to get it off. So, um, yeah, I'll send that off to you.
So, um, [intentionally left blank], have a great day and thank you once again.

B: Sounds good, thank you so much.

M: Take care. Bye-bye.

B: Bye.

Participant 16 Conversation

B: Participant M: Me

*Beginning of conversation inaudible due to poor phone connection.

B: Can you hear me now?

M: Yes, that's much better. That's much better.

B: Alright, well, we'll do this. It's fine. Ready to go.

M: Oh, cool. How's your day been, so far?

B: Well, I just got in, because I had a 10 O'clock phone call, so.

[Laughter]

M: Brilliant! Thank you so much for doing this on such short notice as well, I very much appreciate it. Um...

B: So, go ahead, give me, give me some background before we get going on this. Um, who else you're working with, who else you're interviewing, what other companies you're dealing with.

M: OK. Well, um, I can't tell you who else I am interviewing. Um, that's one of the things, um, that it is all confidential, if you like. Um, same with you as well, but I've, so far I've done 18 interviews, um, in the industry with, um, other builders and operators and some states as well.

B: OK. Wow. Mhm.

M: Um, so, like I said in the email, it's all a part of my PhD. I'm trying to see how stakeholder collaboration in the industry, um, or whether it can, improve risk management procedures for the industry as a whole, rather than looking at individual operators or, or organisations.

B: Is this...

M: Go ahead.

B: Is this specifically about injury prevention based upon incidents? Is that it, or?

M: Um, yes. So, yes, um, well, risk management in, in, in general, um, but, obviously, a big part of it is, um, you know, accident, preventing accidents happening, yeah.

B: Sure. Sure.

M: So, um, obviously, um, if I can just say as well, um, [intentionally left blank], like I said in the email as well, that I am recording the call, which, um, I will send a copy of the recording to you afterwards.

B: Mhm.

M: And then I'll, I'll transcribe the call and, um, and I'll send a copy of that to you as well. Um, and so, basically, we'll talk a little bit about, um, some general, basic questions, um, and then some questions on risk management and then, finally, some questions on collaboration.

B: OK.

M: Um, does that sound alright?

B: Yeah, that's, that's fine.

M: OK. Cool. Like I said, like I said it is all confidential. Any potential identifiers and what not, I'll edit that out of the transcript when I transcribe it.

B: OK.

M: OK. So, do you have any questions before we start?

B: No, no questions.

M: OK. Great. So, um, please tell me about your role within the organisation.

B: Um, I am the owner of [intentionally left blank]. We, um, manufacture steel challenge courses and I also am the owner of 6 operations and we, um, have staff at every operations, we operate them and, um, my role is to be the man. I'm in charge of, when something happens and I have people that do things and I do some things, but something needs to happen, I go make it happen. I'm charge of the [inaudible], basically. Putting the right pecks in the right space and I don't know what else to say. I own, um, I own, um, um, 7 companies.

M: Wow, OK. So, but you, and you own and operate, um, so you build and operate courses, basically?

B: Yeah, I think we're probably the largest ropes course in the world, um, so. We, we do, um, last year we did, um, almost \$4 million in the ropes course operations, one operation.

M: Wow. Wow, OK. Yeah, that's very impressive, [intentionally left blank], yeah. Congratulations, that's brilliant. Um, so, um, and did you, um, do you do just commercial or do you do educational-based courses as well?

B: No, everything is pay-to-play. Everything is walk up, pay your 15 or 25 bucks and go and play as long as you want and go home.

M: Oh, fantastic. Um, and how long have you been involved in the industry?

B: Um, I built my first ropes course in 1982. And I was about 19.

M: Wow. Flipping heck. I built my first ropes course when I was 19 as well.

[Laughter]

B: That's cool. That's cool.

M: Um, wow, OK. Yeah, um, so what do you think is the key attraction to, to these parks?

B: Well, the key attraction is we have two inborn fears. One is the feeling of falling and one is the loud noise, you know, if, if a car backfires, a gunshot happens or a door slams behind your back, your hair stand up, you get goose bumps and you have the fight or flight. That's one. And then the other one is that fear of falling. You know, even babies, if you place them on a table, won't crawl off the table, because they don't want that, to fall and, um, the reason it's popular is because people do not get to address their inborn fears and this gives them the opportunity to do so in a safe environment. That's the reason it's popular.

M: OK. Um, and so do you think this, the thrill-seeking or, um, the perception of risk, do you, what, is that, kind of, the main attraction to the, to the parks, do you think then?

B: Well, I don't know if it's, I think for some it's, I think everybody is individual and I think that's why these ropes courses work so well, especially ours. You know, on our ropes courses, you know, we put more people in the air than, probably, everybody else combined. We put 15-20 million people in the air, annually, on our courses.

M: How many?

B: Um, 15 – 20 million is my guesstimate.

M: What?! Um, wow! How's that possible? I didn't know that was possible.

[Laughter]

B: Well, we do, we had, [intentionally left blank] was open for 3 years and they averaged 6000 people a day all summer, on one course.

M: Oh, OK. Yeah.

B: We have, we have one at [intentionally left blank] that does those same numbers, open 365 days a year.

M: That's incredible.

B: You know, we got [intentionally left blank] that do 2500 people a day four days a week. I mean, you start, we have over 400 courses out there that have been operating now for, you know, 10 years and we add 50 courses a year, this year, and next year it'll be 80 courses a year and, um.

M: Just, just out of curiosity, [intentionally left blank], how did you come up with a concept, a concept in metal? Um, because, obviously, that revolutionised everything when it's traditionally on poles or in the trees.

B: Well, I like, I like the poles and trees better as an experience, but what happened was, you know, I was 19 and for 20 years I was in the field, I was driving 80, 80,000 miles a year, I was gone from Memorial Day to Labour Day, building, you know, I missed my wife every summer, I was making every connection with my own two hands. You know, what you're doing when you're building a in the field on trees and poles is you're a manufacturer, but you're a manufacturer in the field. So, you're manufacturing the cable connection, the poles, you're building the wood. You're doing all this stuff in the field and, I thought, the only way I'm going to be able to grow is going to be about, because I couldn't, I, you had to have the quality. If you don't have the quality, you have injuries, if you have injuries, you're going to be out of business.

M: Yeah.

B: So, I came up with the solution is the only way I was going to be able to multiply was to come up with a medium where I could trust the people and they could do it without me and it took a long time to get there, but, you know, I haven't put up a ropes course in a year and, um, I put 50 ropes courses up this year. So, um, I didn't do it, but my company did it and they're all safe, they're all inspected, they're all, um, made by professionals, installed by professionals, the trainings by us, by professionals and now I have impacted the, um, the world without having to do it with my own two hands. And what happens, as you get older,

is, you know, you run out of energy, you know, I was climbing trees, I was doing all that stuff, but, you know, once you get to 35 or 40 you start thinking, "hey, you know, I gotta work smarter and not harder". When you're 20-25 [inaudible] 24 hours a day you can just go for it, you know, but age makes to have more wisdom. And, um, so that's where we took our company. Very exciting.

M: It is, yeah. I mean, um, yeah, I mean, you're everywhere. I used to live in New Hampshire and that's where I, I had some, um, ropes courses in New Hampshire and Maine, um, and you built on Weirs Beach, um, in New Hampshire, um, I don't know if you remember? You put a small course there.

B: Yeah. Yeah.

M: And then, I sold out in, um, a few years ago...

B: Was that in Laconia? We put one in Laconia.

M: Yeah, that's it. Yeah, that's it, yeah. Um, then I came back to, um, because my wife is from Nottingham, in England, and that's where I'm calling from, so we came back to Nottingham and then I look in the market square and there's one of your courses there as well, um, temporarily.

B: Yeah.

[Laughter]

B: I was, I was, I was hoping to meet the sheriff, but, um, that didn't go.

[Laughter]

M: Yeah, so, yeah, you're everywhere, basically, [intentionally left blank]. Yeah, no, that's brilliant. That's brilliant. That's really good to see as well. Um, so, um, moving on, sorry, [intentionally left blank], um, how, obviously bearing in mind what we've just said about, um, the importance of the thrill-seeking and so on, how, how would you define risk?

B: Well, I, I, I. What do you mean? Define risk. In what aspect?

M: Well, the reason I ask is because, um, the industry seems, has, or seems to have a, um, or different relationship with risk, as you have the participants that, that want this, um, experience or feeling like they're taking a risk, but, um, obviously, neither party, the operator nor the actual participant want to get hurt. So, some people have described it as a

dare, for example, um, and other people either see it, um, as purely negative risk and some people see it as, simply, the unknown.

B: Hm. Yeah, I don't, I don't define it. What I do at my job, as a builder, is to build an apparatus that lets people experience their own level of whatever they call it, fear, risk, if that's your, um, at their own level. So, our, our courses are completely different from a lot of the, I, I have put a lot of thought and design in these courses that, frankly, a lot of people don't do it, but, I mean, this is what I chose to do for a living and this is what I'm going to do it 'til the day I die, so I want to be the best I can be at it. So, when you look at how you get on our courses, OK, you get on our courses on a staircase, basically. So, what that allows a person to do is to acclimatise themselves to the height in a very familiar way. So, people are walking up stairs. They walk upstairs a hundred times. The only thing different is maybe the rails aren't there or the rails are less than the standard rail and they're hooked up to an overhead tracking system. When they get to the first platform, now there's no rail. Now, they're at this point where they're unprotected and they could hang out there or they could go back down the stairs, they get half way up the stairs, they can come right back down the stairs, which doesn't happen in traditional ropes courses. Traditional ropes courses you're climbing a damn utility pole.

[Laughter]

B: And, you're, you're already, your butt is already tight and you're already in fear from the first two stairs. [Inaudible. But, what happens is, on the courses that we own and operate, and I think the reason that they're successful, is that everybody, and that's our tag-line too, you know, um, we have [intentionally left blank], which was our first, um, wooden, wooden one with our tracking system and now we have the [intentionally left blank], but you, you create your own adventure. Nobody tells you where to go. There's no predetermined path. We put easy elements at the beginning of the stuff and the more difficult ones, so if you want to go up and just hang out at a platform, you're more than welcome, or go across the first element that's super-easy, physically and emotionally and then work your way up to the next level, to the next level, you can dip your toe in that risk as much as you want, but it's not my, it's not my job to define risk. It's not my job to tell you what risk is yours and what, what you're supposed to be thinking. It's my job to let you experience as much as you want or as little as you want, so I can get your \$25 and then you come back, because, it's when you come back, the whole experience is different, because you have experience now. First time you do anything it's weird and second time you do it, you're more familiar

with it. And, then my job becomes, as a builder, to give the owners of these courses unlimited potential to bring these people back over and over and over. So, what we do is we have 5 or 600 elements that people can pick and we're always under the gun to develop new elements. We developed 25 new ones last year, we've got 25 new ones this year, coming out. They're more interactive, they move when you go, I mean, we have RFID and light sensor elements we're coming up with this year, so when you get in the middle it might trigger and move for you. But, it's also based on what you pick. So, you can pick your buck to be a beginners buck, an intermediate buck or an advanced buck and what's happening on the intermediate buck maybe half the elements the elements will move, or maybe a quarter of them will move or some of them won't move and some of them will move violently, but when you get the advanced buck, things are more advanced and when you get the beginners buck, nothing might move or just a couple of things and, um, you know, that's the future of what we see. And, you know, my job is not to say what risk is or what adventure, my job is to provide a safe environment with a multiple experience that you can go over and over again, it's always going to be different. Because, the ultimate goal is to make money and if I'm selling this stuff to people for a million bucks, they want to get their investment back this year, next year, the year after and the year after. And I'm in the same boat. You know, our, right now we're the world's largest, um, brand in this market, we're also the world's largest manufacturer and in a few years, probably three years, we'll be the world's largest operator.

M: Wow. Wow, OK. Wow, OK. So, you've got a lot of plans to open more sites yourself as well then, or?

B: Yeah. Yeah. We're rolling that out every day. We'll probably do 4 this year and 4 the next year, but the thing is, you know, when you open up one, um, all-inclusive, our store in, um, [intentionally left blank] does about \$5million including food, now when you open up a Bean Stalk or a Monkey Trunks, I mean, they're doing \$250-500,000. When you start checking out stores that are doing \$5-8million in every major city, you have a different thing. It's a different animal. You know, it doesn't take, they can operate 100 courses and I can operate 10 and do more than their hundred, volume-wise and reach wise. But, it is a different experience and I think those things will still, you know, still prosper, because they're a different experience. My experience is just the American experience.

[Laughter]

B: You know, you pay your \$25, you go play, you go home and eat some pizza, have some ice cream, get a video sent to you, you know, come back the next, you know, six months later and do it again and maybe the experience is different, because they have different things and what not. That's, that's what we do.

M: Yeah, I mean, you clearly operate at a completely different level to, um, like you said, um, most other ropes courses, um, very much so, yeah. So, um, what do you think are the key challenges you face in risk management, [intentionally left blank]?

B: Hm. For me personally, other people's equipment. Our... we try to think further ahead than everybody else. You know, we have the track, people can go wherever they want, we have, um, but we have copy cats. You know, people copy our system outside the country and, um, but they can't copy us because, we, they can copy us, but they're not fast. We just keep getting better and better. But, when we think about our, when we think about our safety system we always think of two. So, when our buck is in the slider, there's two, two 5,000 buck cables [inaudible]. On our lanyards, all of our, all of our staff which was manufactured a year ago there's always two lanyards, there's always two carabiners, there's always two hook-ins on your harness, um, and it's a full-body harness. And we try to always keep everything in twos and, um, making sure that people can't unhook. We developed a special carabiner, that's now made by Petzl that allows you not to open your carabiner. Um, and we've just, and realistically to me, the thing that I worry about the most is that, you know, we have QUICKjumps on our stuff and the QUICKjump has one tether. I would love to have QUICKjumps with two tethers, so I'm trying to work with Headrush to develop on with two tethers. Just to have a backup.

M: Oh, of course, yeah.

B: Because, for me it's always the backup and so, you know, nothing keeps me up at night, because this stuff is fairly safe, but the one thing that I think is our biggest thing is other people's equipment that isn't redundant and all I can do is try to work with them to try to make it redundant.

M: OK. So, you work closely with the manufacturers, then, basically, [intentionally left blank]?

B: Oh, well, we're a big player, so, everyone knows who we are. You know, and everyone wants the same thing, um, to be safe, so, um.

M: Yeah, for sure. Um, now the carabiner that you worked with on Petzl, for example, is that one they've designed exclusively for you then, or?

B: No, no, we didn't work with Petzl. We made a design and they copied us.

M: Oh, they copied you? Oh. That's naughty, yeah.

B: Yeah, no, but that's OK. I mean, no laws were broken, but it doesn't matter to us, because, well, they could make it a dollar cheaper than we could, so we just buy it from them.

[Laughter]

B: I think we bought like 80,000 of them this year, so, you, you got to be pragmatic too, you know.

M: So, do you develop a lot of your own equipment, then? Harnesses as well?

B: Yeah. Yeah. The harnesses are a 100% custom, custom design of ours. We went out and we found a manufacturer and they manufacture it for us, so 100% our design. The course, our [intentionally left blank], [intentionally left blank] is incredible. I mean, we do more zips than anybody. At our course in [intentionally left blank] we can do 6000 zips in one day.

M: Wow. Well, I saw, um, I saw your stall at IAAPA, actually, in Orlando. You were busy when I walked past you, um, but, um, and I saw the zipline that you have on the course there, which was really quite cool, um, but, um, is that relatively, quite new? Because, I haven't seen that on your courses before.

B: Um, we've had it for four or five years, it's been at IAAPA for four or five years. But, what is new and what's really developed it [inaudible] is the automatic system, so you don't need any staff. And, um, that one is the first patent that we've patented in 5 countries, so we have that patented in UK and in Germany and in Austria and one other country, two other countries. So, um, we're excited about that patent, because it allows us to go from zip to ropes and then with no staff, because staff is everything, labour is everything.

M: Yeah, for sure. Um, wow, OK. Um, so, do, do you, there isn't really a need for monitors then is there?

B: No, we do, just because it's a thing that people haven't done. So, let's say we have, we have four courses in [intentionally left blank], so we just have a staff on the first one to talk you through it. Because, once you do it once you know how to do it. "Look at the green

light, when the green light says go, you go, you walk off the end, you sit down". Very simple. And, um, so, we just have, once they show you how to do it once the rest of the time you're on your own.

M: Wow. So, obviously, considering you're, if you're developing a lot, or most of your own stuff, how has innovation affected risk management procedures for you, do you think?

B: Hm. How has it affected risk management? Well, it's funny, because, you know, we are, if you follow the history, you know, when I was first doing ropes courses, we were using two carabiners, a model 81 [inaudible] carabiner, steel, non-locking and you would take, you would unhook one, you would ask permission from the ground, "may I unhook one?". You would unhook one and then you would hook it over, then you would ask permission to unhook the second one, then you would unhook the second one and you'd hook it over. Then you would make sure one was split, so they were opposite, so the gates were opposite, so they couldn't both come off at the same time. That was monitored over a lot of years very safely. I mean, I put 100,000s of people in the year, you know, but the limitations were you had to have 2 staff to 12 people. But, everybody was on ropes courses. I mean, this was back in the 80s and 90s and that worked really well. So, you had a lot of procedures. You had to go through a whole class before you went up in the air on how to do this, you had to pass. You learned the skill-set to go up. Now, with our courses, we put the harness on, we put them on the track, we say "no running and one person on the element at a time". So, um, you tell me, how has, um, technology impacted procedures? I mean, pretty, um, pretty impressive. I mean, it's pretty, um, you know, back in the day, you know, some manufacturers used to tie their harnesses out of webbing.

[Laughter]

B: Because they wanted, they wanted the experience. You know, PA [Project Adventure] used to do that, because their, their goal was the experience, you know, and, um, they designed all their curriculum, so one person who ran a gym class could run 30 kids. So, um, it was a whole different thing.

M: Yeah, that is, um, very different to now. Um, OK, so I guess, bearing that in mind, what does effective risk management look like to you, [intentionally left blank]?

B: Well, effective risk management, for us, is the, now that we've moved ropes courses so close to the pay-to-play, most states consider us an amusement device. So, what we've done is we've, basically, gloved on to amusement device risk management procedures,

which means every day the equipment gets inspected on a check-list and looked at before it gets used. The course is gone through and looked at before it gets used. Everything is recorded and if there's an issue it gets reported and that gets send to us and, you know, there's a decent amount of training on how to do an inspection and what to do. But, you know, once we've had out the trees and the poles, I mean, you don't, and the single-pointed figure cable, I mean, there's not a lot to look at. I mean, there's, um, you have to make sure the bolts are tight and the welds aren't broken. I mean, make sure the paint is touched up and there's no rust on it. It's pretty, it's a lot more simple than doing an inspection on a utility pole course, because you don't have to have the same skill-set on it. I mean, I remember when we used to do inspections on a utility pole course, you had a ground anchor on the ground. You don't know who put it in, you don't know who put it in, you don't know what kind of soil composition it is. I mean, all of those things, you know, there could be ten things just to know about the ground anchors. So, I think, um, as we took manufacturing into modern, you know, there's a lot more hours of learning already happened in steel manufacturing. Welding processes are [inaudible], you know, bolting processes are [inaudible], painting processes are [inaudible]. You know, we're, it's just, um, you, you went from the Wild West to modern manufacturing is what we did and so, with that, risk management is already figured out for you. Back in the day we were figuring out our own risk management. We didn't have, we were, were making it, we were creating it as we went along, you know.

M: So...

B: And, um, I don't even really remember the question. I'm just, sort of, painting a picture. I forgot the question.

M: No, no, it's alright, [intentionally left blank]. I asked you what effective risk management looks like to you, but, um, it sounds to me as though you've, um, taken a lot of that human factor, or element, out of risk management, haven't you, in the sense that, a lot of the time it's human error that leads to something, um, or an incident, um, but that doesn't sound like, um, it's potentially even possible on your courses, um.

B: Well, yeah, it is. It is not really possible on our courses unless the human is the operator who doesn't do an inspection and somebody spills acid on a bunch of lanyards and they go get used and somebody falls because the lanyard had acid on it. I mean, that's the kind of incident that you could have.

M: Yeah. Yeah. Um, yeah. So, OK. Um, I mean, bearing that in mind, what role does risk management have on the overall strategy of your organisation?

B: Well, this is what it does, because we still have injuries and injuries, injuries happen. Usually, when people are running, or going fast on elements, they get close to the platform and they slip and they scrape their shin. So, um, so then we ask ourselves, "Oh, should we pad everything?". You know, I'm not a big padding guy and, and the fact is, when you look at the amount of injuries we get, the amount of people we have on, you know, there's certain risk you need to accept, especially, like walking down the street and jogging and playing basketball and playing any sport, doing anything adventurous. I mean, it's incumbent upon the manufacturer. We have to make sure we don't have any sharp edges, that's for sure. But, other than not having sharp edges and things that could poke you in the eye, catch your arm because of the sign and, you know, pull your arm out of joint, you know, those kind of things. We've just got to provide a, a nice fun thing for you to walk on that's not going to promote you falling and hurting yourself. So, that's really the fine line we walk. When we come up with a new element we build it in our back room. We all hop on it. It's ready for everybody to use. We have 75 employees here. People on their breaks go on it. We bring kids out, put kids on it. We look at it. Then we decide, you know, we do a, we do an analysis, you know, are there any sharp edges, can people get their foot caught here? Could people do this? Could people do that? And then we go, based upon our experience, we say, "OK, well, if we change this it's OK or it's too dangerous because of this". And so, that's really where risk management comes in is upfront in design and then, also, any time there's an injury we get a report and then every year we review those reports. Look at how many injuries were scrapings, how many injuries were this or that, how many people peed their pants, how many people threw up there, how many people pooped themselves, whatever it is. Then we ask ourselves, every year we ask ourselves, "What can we do?". As a simple example, peeing yourself, we call it "code yellow".

[Laughter]

B: So, um, you know, we were in a zoo 8 years ago that we operated in and the kids were peeing their pants all the time. Come to find out, the kids were afraid to get out of line and go pee, because they thought they'd lose their place in line. So, what we did, what we did is we put signs up. We've got signs up on all of our ropes courses now that you can get out of line and go to the bathroom and get back in line, wherever you were, and that cut down about 95%.

[Laughter]

M: Yeah.

B: And then, also, also, when we have kids, we always ask them, when we're putting the harness on, "you gotta go to the bathroom? Go ahead and go. You can come right back, don't worry about it". And that, that helps, between just those two things cut down on people peeing themselves 95-99%. And then you look at those things, whatever it is. You know, I mean, don't get me wrong, peeing yourself isn't a, isn't a physical injury, but it certainly can be an emotional injury. So... I peed my pants in second grade and I still remember it.

[Laughter]

B: The damn, the damn, I had a substitute teacher and she wouldn't let me go to the bathroom. Of course, I waited 'til the last minute and there was only five minutes left of class and she said, "Oh, you can wait". I went back and peed my pants. I hope she felt good.

[Laughter]

M: That's, um, yeah. Yeah. I've never tried that, but, um, yeah, I can imagine it's a really, um, one that sticks with you for, for life, yeah. Um, well, I mean, that's interesting that you, you, you obviously get tons of data in from all of your parks. Is that just parks that you operate or is it parks that you don't operate, that you've just built for other people as well?

B: No, any kind of injury we, as a manufacturer, we get it, because we put it on our contracts. And, um, we get, we get incident reports from, from everywhere. Then, at the end of the year we compile them, we look at them and we try to see how we can get better.

M: OK. So, um, overall, then, [intentionally left blank], what kinds of, or what lines of communication exists between, I guess, management and, um, your front-line staff, um, in terms of sharing knowledge on risk management? Do you have meetings or, yeah?

B: Well, we have, I mean, we have a full training. I mean, our training is on-going and, um, you know, who, anybody that operates our courses have to be fully certified by us. I mean, this is not, they can't, they can't buy our courses and do their own certification. We have files on every single operator that's operating every one of our 400 courses.

M: Wow. OK. Wow, OK. Um, and so, how do you, how do you empower, or encourage staff to share information, or the knowledge, that they, um, that they have?

B: Well, it's part of the training. I mean, they fill out a report in the training. "This is how you fill out an incident report, this is how you fill out an accident report" and when an incident or accident happens we get the report, we put it in the file, we move it ahead and then if we see anything, you know, if we see a pattern that could be construed throughout our all 400 courses, which we have before. You know, we've issued recalls, um, once we had a bolt break. Um, we used to use, um, before we did the double-cable system, you know, we had a single bolt and we had one of those break. Fortunately, nobody got hurt, but we shut down every single course that we had and we replaced, like, 5000 bolts in a week at our cost and just told [inaudible] and replaced everything, changed the kind of bolt it was, did different engineering. We were just glad that nobody got hurt, and then, um, opened it back up and did it. And, um, we had a design issue on a zipline once where a guy died. He fell off the zipline. We had 28 of those out there. They weren't ziplines, they were [intentionally left blank]. We closed down all 28 of them, we built 28 brand new ones with a different design. We took all 28 of those down, threw them away and built 28 all new ones all at no cost to our customers. It cost us about 2.5 million to do that and, um, everybody was up and running again and, um, if we didn't lose one customer, we didn't lose, um, one of anything, because we paid for it all. We made it right. People understand things happen and, um, found a flaw, fixed the flaw and, um, zip millions of people every, who knows, I don't know how many people go on [intentionally left blank], but it's a huge number.

M: That's alright, yeah. So, but, um, it sounds as though you're quite, um, close contact with all your customers, um, basically?

B: Yeah, I don't know about everybody, but, um, we had, you know, we use Sales Force, which is a CRM, because we're, for our relationship management system, then we have files and notes on everything. Not only do we have them on our customers, but, every single ropes course has from 50 – 200 lanyards, OK, and harnesses and every lanyard and harness has a unique number and every unique number is assigned to each unique customer and every inspection we inspect those unique numbers of those unique customers and we approve or disapprove and if they need a new lanyard or new harness, those numbers come in. We send them new harnesses with new numbers allocated to their course, so we can, we have traceability on all of our safety equipment at every course. It's a big undertaking, but once you have the system setup and the right training, it happens, but, I doubt anyone else does it in our industry.

M: Yeah, that's very, that's very detailed, um, which is brilliant when it comes to risk management. You have to be that. Um, um, so, what role, um, do you think that leadership plays in effective risk management?

B: It's interesting you say that.

M: Yeah? Why do you think that?

B: Because, um, no, I mean, it's an interesting question, because, you asked me at the beginning what I thought I did. It's funny, because, what I do is leadership, that's what I do. It's like herding cats, you know. You set the vision and then you set them out on their path and then you constantly repeat your vision over and over and over. You know, you make sure they have all the tools, all your cust, all your participants, your, um, employees have all the tools they need to do their job and what they need the mostly, and, um, it's up to them to do their job, and, um, and I've found that most positive people want to do their job and if you give them sufficient support and, um, the type of support each individual needs, the right tools, I mean, your company is just going to go in the right place and, um, safety, safety has always been the number one [inaudible] and we all know that, because if you don't have that you don't have a company doing this kind of stuff. Um, that's it. So, leadership is a huge, I mean, leadership is everything. Not just leadership. There's leadership and vision. Being able to share that vision and share that, um, what the expectations are with the employees. How they act and when they don't act correct, you have to have a training program and if they can't hack that and make the improvements, you still like them, but you've got to let them go. You have to say, "Hey, I like you a lot, but you're just not cutting it here". A lot of times we can find a different place for them, because, from us, you know, we have people sweeping floors, we have welders, we have trainers, we have sales people, you know, designers, engineers, it's a pretty wide range. So, a lot of times we can move people laterally to a different position, um, that they're better suited for and as you become a better leader and a better manager of people you realise how to put the right person in the right peck. You, you just need a square peck in a square hole and a round peck in a round hole.

M: Yeah, you start to know what you're looking for. Yeah.

B: Exactly. I mean, you've got to, you can't ask a non-detailed person to do a detailed job and vice versa and, um, the, and the better you become as a manager, the better your organisation becomes. Leadership, and leadership is the ultimate role in, and, but not just

in safety, it's in everything. Leadership is the, leadership is the most important part and I'd like to think that we have decent leadership in this company, because we're the largest, most successful and, you know, we do the best we can.

M: Yeah. I was going to say, you must be doing something right, so.

[Laughter]

B: Yeah. Yeah. We don't, we don't, hey, I've done everything wrong I could and it's cost me, but, but, you know, my wife and I, my wife and I say that if we write a book, you know, we already know what the title is, it's called "Too Stupid To Quit".

[Laughter]

B: You know, if you don't quit, you just keep going, good things are going to happen.

M: Yeah. Are you thinking about writing a book?

B: No.

M: No.

B: Not never, but not now. It's just an idea. It wouldn't be about ropes courses if I did.

M: Oh, OK. OK. Um, I mean, I just think that, um, your story is quite interesting, so, um, yeah. Well, hey, ho. Um, so, do you, I mean, because you're so different from all the other, um, ropes courses, so do you follow specific standards or have you made your own or how does that work?

B: Well, what we do is, um, we follow the standards for ASTM, which is amusement park standards and then we're also, now, um, are doing our first EN-1090 course, so that's a different manufacturing standard for Europe, and then we, you know, I came from ACCT. So there's a lot of good things that ACCT have that doesn't really apply to us, but there's a lot of good processes that they have, that, that, um, that just been developed that are just basic, good common sense. So, we try to draw from wherever we can draw from.

M: OK. Yeah. Um, yeah, that's a lot. Um, do you think it's, um, I guess for, for, for the industry, in general, is it, is it an issue that there are so many standards? Because, you've got, like, ASTM, ACCT, PRCA and so on. Is that an issue do you think? Or does it not bother you?

B: It doesn't bother me. Never bothered me. Because, I was, I was always, I mean, I was, I was only the second the PVM to ever quit ACCT. I was the youngest guy ever on the board, I was on the board of directors at 24. I was, um, on the executive committee. I was the first, I was the second one to quit. Another guy quit, his name was Mike Hardley, he quit to become a nurse.

M: OK.

B: I, I quit to become something else. I just, I just felt too constrained. I felt I was at the point where I didn't need ACCT, is where I was at. And, um, they were getting a little constraining. Um, it was back before, you know, I was really a cast-out. I, um, because I wanted people to just be able to walk up and pay \$25 or 10 bucks and go on a ropes course and everybody called me, um, you know, everything, but a white man. What they called me is, um, is terrible. And, um, but I got my comeuppance when these zipline canopy tour things started and, you know, because these people barely made any money and they could barely, hardly, rope two nickels together and they thought the only way you could have an experience was if somebody supervised you and told you what to think about the experience. Really, a [inaudible] looney-bin. And, um, and people, I mean, not that they had bad hearts, but these people, don't get me wrong, good people and good friends, but, you know, just me being me, you know, I was the kind of guy that learned from a library. I didn't need somebody to tell me what to think about something I read. I wanted to read my own books. I wanted to read 100 books. I wanted to go live the hundred experiences, then decide what I wanted to think about those experiences and there's different learning styles and I was just different learning style and, and my dream, from the beginning, was to put ropes courses up around the world and people could just walk up with \$10 or 15 bucks and say, "I wanna go play" and go play, because that's all it was to me. All these things ever were to me was just a fun thing to do, nothing deeper than that. No magic, finding myself on a ropes course, learning who I was, nothing like that.

[Laughter]

B: My, to me it was just good fun and then have a pizza and some ice cream afterwards and go home. That's all it ever was to me.

M: Yeah. Yeah, well, yeah. And I think that, um, I mean, they've started to come around now, haven't they, the ACCT? Um.

B: Oh, yeah, they have, they have, because some of them are making money now. Some of them are enjoying real money and in this day and age you can make money with this stuff too.

M: Yeah.

[Laughter]

M: Um, so now, obviously, if you, you, you're in different countries and, and obviously, in different states and so on, how do the, the various states, um, how do they influence risk management procedures for you? Um, or do they? Do they regulate your courses?

B: Yeah, but they're, they're catch-up. Everything they do is catch-up. We're, we're so far ahead of them that we give them their stuff and they almost always say, "That's fine". Um, for us, the, the fight is more code wise. You know, if we make an inclined element looks like a staircase. We've had people say, "Well, that's a staircase. That needs handrails that needs kick-plates, it needs this, it needs that". We've had that happen, I don't know, twenty times? And we say, "well, it's not a staircase, it's an amusement device" and he says, "why?", because, when you put your puck in the track you're on the safety system. So, if you fall, you can't fall down the stairs. You'd fall, like, four stairs and then you'd stop and then almost always they say, "Oh that makes sense. I'm not worried about that code then". But, you know, code-compliance people, they look at the rest of the course and they don't care, because they don't see any similarities to any codes that they see, but when they see that staircase, "oh my God, that's a staircase, we're going to regulate that".

[Laughter]

B: We did actually, and, um, we've written letters and usually if a professional engineer writes a letter, states his case to the local code official and say, "hey, this makes sense". But, we did in Chicago, at one time, have a bust with them, where the code official made us make this a regular staircase. So, we just did it. We got paid for it. It didn't hurt us, but, um, it was just, it was just nonsense, but it is what it is. But, um, normally, they just want basic stuff. I mean, I'm always against government regulation and what not, but what I've found is it's so low. The bar is so low. I mean, you have these jokers that are government officials coming out, looking at stuff. They're schmoes trying to make a dollar. State charges 50 bucks or 300 bucks. You just pay the man and move the fuck on. Do your paperwork. They just want to make sure that you're checking your stuff, so you check your stuff and you send it in. It is what it is, so, you just have to learn that that's part of the deal.

M: Do you, um, is it an issue that, um, there is a lack of industry experience on the public agency side?

B: Oh, yeah and it always will be, because things change. The government cannot, the government can never react as fast as the market place. Never.

M: Right.

B: That's why they're trying to close down all this internet stuff. It doesn't matter. In 2 years we'll have a different type of internet. You know, you, you, you can't catch up. The market place runs. Government drags behind it, tries to suck us dry.

[Laughter]

M: Yeah, it's, um, I mean, when I've spoken to, um, you know, to other, um, builders, in particular, you know, they've said that sometimes they've found that they have to, you know educate, um, these, um, the government people and so on, um, because they don't know what they're looking at in this industry.

B: Yeah, exactly. You do what you do. But, for us it's a little bit, it's a little bit easier for us, because they understand structural steel and they understand the type of blueprints stamped by a professional engineer. We have, you know, we're the only company, um, you know, we have, like 4 structural engineers on staff, 3 or 4 structural engineers and professional designers and, um, you know, I, we were the first ropes course company, ever, to start stamping all of our plans. 15-20 years ago, I mentioned it to everybody, "you guys have got to start stamping your plans" and everybody was just "that would cost us a lot of money. It's too much money". I mean, whatever. It's just funny.

M: Yeah. Um, so I mean, um, do you, do you collaborate with other, other organisations, then, um, [intentionally left blank]? Because, I know you said you're no longer in the ACCT.

B: Yeah, well, we're actually getting back into the ACCT. Some of my people wanted to join it, so I think we're, we're, we maybe become PVMs. I don't know where the process is right now. They were just going to reinstate us and, um, but I don't know what the final decision is from our side, if it's been made or. You know, my people came to me and said, "Hey, it's interesting" and I said, "Well, do it". You know, we sent 6 or 7 people to ACCT this year, and we'll try to continue to do that. You know, we sit on the ASTM F-24 committee, the subcommittee for challenge, adventure course. You know, we've, we've, we have built to

the standards in China that their, adventure course standards, you know, we've built, I don't know, in 30, 40 countries now? We've pretty much, pretty much done everything.

M: OK, yeah. Um, and then, um, do you, are you aware of any levels of collaboration within the industry as such, or?

B: Like, like, what? I don't understand.

M: Well, I think, yeah, so, my focus is, obviously, on, um, um, on risk management, so, do you know if, are you aware of any people in the industry working together on that? On how to improve risk management, currently or is that something that happens at ACCT?

B: Well, the thing, no, well, the thing is, if you look at how many people you put on this and how low the injuries are. There are not injuries coming from, there are not major injuries coming from our industry, not happening, with the amount people we put through. We're talking about 2 or 3 people dying a year in our industry. I mean, if you're looking at 30, 40, 50, 60 million people, 2 people, 3 people dying, that's just nonsense. It's, and, um, most of these injuries are on ziplines and most of those injuries are ones made at your house. So, it's just, um, there's just no pressure and until, you know, a few deaths have to happen where it's an issue with equipment or with the manufacturer, then maybe something will happen, but, and it's always been that way, because we have always self-regulated so well. We operated for 20 years without any government ever telling us to do anything. The first government agency to do that was Massachusetts.

M: Really?

B: We were about, yeah, we were pooping ourselves. We said, "What?", so we actually educated them and help get them get the regulations and, and, um, you know, there's still states that don't need anything, you know, out there. Most of the western states, there's no other western states [inaudible] have amusement device rules, you know. That's just the way it is.

M: Wow, OK. I didn't know that. Wow, OK. Um, I mean, um, how do you, how do you, as an organisation, how do you work with the rest of the industry, um, [intentionally left blank]? Or do you, um, communicate or talk to other builders and so on about what, I guess, because you're quite different, obviously. Um, do you find it useful?

B: Yeah, I think, I think that, um, I don't really talk with the people that have been in the industry in the last 10 years, because I don't know them, but everybody before that are all

my friends and acquaintances, you know, so we, we, you know, and a lot of my guys are retired now. You know, they sold their business to their son or they sold their business to the guy that worked for them and, and they teach college now or they, you know, we've known each other forever, so we pick up the phone and we might talk once a year. It's usually the 'old buy network'. So, let's say I ran into a problem somewhere, no matter what it is, and I say, "hey, I'll call, let me call this guy, let me call Randy Smith. Randy, what's going on with this state?". "Oh, [intentionally left blank], do this, this, this". "OK, thanks, Randy. How's the kids? How's your wife?". You know, that's how we collaborate, and, um, because we've all been through a million fucking hoops and they're always going to throw a new one up, but fortunately one of your friends has already gone through it, so they just coach you what to do, you know. It's pretty simple.

M: OK. So, um, you do, um, communicate then, um, with, um, with people from the industry. I wasn't sure, because it sounded a bit as if, as if you were a bit detached from it, because it's so different what you're doing and so on.

B: Oh, no, no, no. We still call and talk, once a year, twice a year with somebody here or somebody calls us, says "[intentionally left blank] how are you doing that? What do you think about that?". So, yeah, there's still collaboration taking place. For sure. For sure.

M: Mm. Mm. Now, obviously, you're at a, um, different level to a lot of the other people in the industry, who are more, um, smaller operations, if you like, um, do you think...

B: They work out of their garage.

[Laughter]

B: I worked out of my garage too once. I started out of my mom's garage. I hadn't [inaudible] my own garage. I started at my mom's garage.

[Laughter]

M: Now, that's the American Dream, though, isn't it? That's how all the, um, Silicon Valley started and all that stuff as well.

B: Yeah, yeah. At least Bill Gates had his own garage. I had my mom's garage.

[Laughter]

M: Yeah, good point!

B: I was living in her basement, working out of her garage.

M: That's insane, that is. Yeah, but I mean, you appreciate it so much more when, um, you start something from the bottom, isn't it?

B: I don't know. I don't know. That's the only way I know.

M: No?

B: I don't know. How can I say, because I've never known any other way? I mean, I might have appreciated if my dad was a millionaire and he gave me, you know, and I learned business and went to the right college. I might appreciate that more, because I might have ten times more money. I mean, I don't know, I mean, I appreciate where it came from, but I don't know, I don't know about anybody else, where they came from and how they appreciate it, you know, who knows?

M: Who knows? Um, so, but, yeah, with them being, um, smaller organisations and so on, um, obviously, specifically finances and so on, um, well you've already touched on that yourself, is, um, is, um, limited, if you like, so how do you think that might affect their ability to collaborate, um, with other, um, organisations? Because, I'm thinking, particularly at the ACCT conference, for example, is expensive to smaller organisations and it's, obviously, once per year.

B: Can you clarify that a little bit more? So, you're talking about, you're thinking ACCT is expensive? Or, you're thinking?

M: Well, so basically, my question is, um, given that the majority of the stakeholders in the industry are, are smaller operations or organisations, how do you think this may impact collaboration in the industry?

B: Um, they've, they've always been small fries. You've got to remember, the reason these guys are in business is to make a dollar. OK. And, and they think that building a ropes course, it's going to be a quicker way to make a dollar than something else. So, everybody starts out small, everybody starts full of ideas, I did too, [inaudible], so, we all start out small and what happens is, if you can't survive, if you can't get enough jobs, you fold and, but, um, you know, ACCT, I always could afford to go there, because it was so important to me and that's where the hub, that's where the hub of all the information was and, um, you know, that's one thing we did that was really smart is we got together and worked together to create standards and that was a huge deal. If we wouldn't have done that, I don't think any of us would've survived, or I mean, very, very few of us. But, um, I don't, I don't think, and nowadays you don't need a dollar to collaborate. All you need is the internet. I mean,

nobody needs a dollar to collaborate anymore. You've got YouTube. I can, I can, I can go to YouTube, type in: "how am I going to rebuild my engine?", go buy \$400 worth of parts and rebuild an engine for 400 bucks that would cost me 5 or 6000 bucks to buy new. I mean, there's no excuse. Money that they spend on schools. It's just stupid and political. Give every kid an iPad and a will to learn. Schools should cost nothing, because the information's there. We're teaching the same damn information we taught 100 years: algebra, calculus, [inaudible], reading, writing, arithmetic. The only reason the government wants schools is to breed these fucking kids into some kind of [inaudible] and control everybody so they, I don't get the whole thing. Sorry I went on a rant.

[Laughter]

M: No, it's alright. It's alright.

B: Collaboration, collaboration costs no money. Collaboration doesn't cost a penny nowadays. I mean, get on the damn internet and Skype. Look what you're doing. This doesn't cost anything. We're Skyping. We're talking and, um, you're getting all the information you want and it doesn't cost a penny. It costs you some time.

M: Yeah, that's it. Yeah.

B: So, that question, that question, on its face, is, um, is, um, is, is a moot, a moot point.

M: OK. Um, so, what do you think, then, are the benefits of collaborating, um, especially on things like, um, risk management and, um, improving your operations and so on. Um, what do you think are the benefits of collaborating?

B: Well, I, I think if you're a small actor and you do courses, you don't have a very big deficit, so I mean, if you have collaboration with a lot of people, which, you know, the industry, Project Adventure was the first one to collaborate, they did a 25-year safety study, probably, 20 years ago and they opened it up, they let everybody buy it. You could go on that safety study and you could see what kind of injuries were happening, what's going on and, um, you know. I think collaboration is great for people that don't have big data sets. It's interesting, because, I mean, when you look at our data sets, you know, we've got 400 courses, we've got more people going on these than anybody else, we've got four engineers, we've got, you know, 3 full-time trainers, several part-time trainers, all these designers. We collaborate within ourselves all the time. We're always pushing ourselves, we're always trying to improve. Where are we finding injuries? Always looking at the equipment, every year. How do we make it cheaper? How do we make it faster? How

do we make it better? [Inaudible]. How do we take out labour? How do we do this? I mean, we're collaborating internally all the time, but I just don't think, I mean, we looked to other industries. You know, we look at other industries and we look at other people. You know, you're always collaborating. Collaborating is another name for learning, really.

M: Yeah.

B: And, um, and as long as you, you know, and it comes back to leadership. If you maintain a culture of, "let's ask questions. Let's not be afraid to ask questions, let's always try to be better", you know, you're going to collaborate, you're going to try to be better. It's the same reason that we went back to ACCT. Didn't know that there was anything to learn, two or three of my people said, "hey, there might be something there for us" and I said "go".

M: OK. Wow. And what do you think, um, again, would you say that leadership is quite important in collaboration as well.

B: Well, I think leadership stems from everything. I mean, Leadership and vision. If you don't have the vision to think about collaborating, and collaborating is an interesting word, because, to me, collaboration means learning from others.

M: It is, essentially, yeah.

B: The, the way you're trying to use that work.

M: Yeah, definitely, yeah.

B: And I think, I think the correct mind-set of a successful company or a successful person is that you learn from others and, and you can go back, and I can go back and if I went to ACCT today and there was a guy or two that were there that were the same size company they were for 20 years and they always wanted to get bigger and they couldn't get bigger it's probably because they couldn't listen and they couldn't learn, because, and I know several people that I like there, they can never figure out how to get big, they could never figure out how to build a system. It's all about systems. If you can't build a system that can run by itself, or with very little management, you can't build anything. It's all about sustainable systems and, um, you know, when I was 25 years old, 20 years old, I didn't know what a system was. You know, I, it takes time to learn that.

M: Yeah, I mean, everything is setup by systems, isn't it? Um, any, um, job, if you like.

B: Yeah, whether you know it or not! Whether you know it or not and, um, these people that are unorganised and don't have these systems are just, um. Fortunately, I married a woman that can create a system out of anything. You know, without her.

M: Does she work with you?

B: Yeah. She's the CEO. She's the main brain. She keeps me on the straight and narrow. I mean I have some certain things and she has certain things and, fortunately, our things are completely different, so when you put us together it makes us better, you know. I wouldn't be, I'd still be living in a van down by the river if she wasn't with me.

M: Oh, that's lovely. No, we, um, the parks we had, um, in New England, that was my wife and I together as well and, um, yeah, which was lovely as well. But it worked well, like you guys as well, you know, she brought something to the table and I brought something to the table and that's obviously, that's how you do a good partnership anyway, isn't it?

B: That's what women are for. That's what, that's what, two people together can do more than two people apart, that's for sure.

M: Yeah. Yeah, definitely. Now, um, in the amusement ride, um, industry, um, they have something called SaferParks, I don't know if you're familiar with that?

B: Yeah, I've heard of that.

M: Yeah, so it's basically like a magazine, I think, um, that, um, where they communicate with each other on any incidences that have happened in the industry, what the cause was and so on and so forth. Do you think something like that would be beneficial in the, um, in the aerial adventure industry?

B: Oh, I think anything like that's beneficial, for sure and if you can get that information immediately, hm, wouldn't that be beneficial? I mean, that, um, I mean, I think, you know, these people came up with this magazine, you know, I like it and that, just looking at what's going on in the industry, this magazine.

M: Is that the Adventure Park Insider, or?

B: Yeah, yeah, yeah. That's the one. I think that's cool and I think it's fun for the industry.

M: Yeah, for sure. Yeah. Um.

B: And I think, and I think, I think that a part of that, I think a part of that could be that, you know, ACCT does a newsletter, I don't know if they still do a newsletter, but they used to

do a newsletter and we used to put that stuff [inaudible]. Any kind of new events. Back in the day. I don't know if they still do that.

M: Oh, OK. I don't think they do. Or if they do, I'm not aware of it, because I'm a member of the ACCT as well...

B: Yeah, yeah, yeah.

M: [...] and, um, I don't know about that one. Um.

B: Well, I remember we used to do it, because my wife used to do the newsletter, so.

[Laughter]

B: And, um, yeah, we ran, we used to, we used to run the ACCT office for about 6 or 7 years right here out of [intentionally left blank].

M: Oh, my God. And then you just, um.

B: My wife was on the board of directors. Yeah, then it just got too political. I mean, you know, I think, I think we were starting to get successful and other people weren't.

M: Sometimes, people can look...

B: Whatever, it doesn't matter to me.

M: Yeah. Anyway, so what I was going to ask is, obviously, so you sit, I mean, your system, um, it sounds incredible, in terms of how you get your data in and all that stuff. How, how would you feel about, um, sharing that data, anonymously, um, with the rest of the industry? So, you know.

B: Um, yeah, I don't know. I didn't think about that, because I don't, to tell you the truth, I really just don't understand how our data would be similar to their, I mean, they would have to change the way they build their stuff. I mean, it's just a different animal. It's like, it's like data from race car accidents versus data from driving in a regular car accidents. Too different. You're in, you're in a car in both of them, but one car has different rules of operation than the other, so I don't even know that that would be, that that would matter. And, besides, our injuries are scrapes, most of our injuries are scrapes and bruises. Scrapes or bruises. It's like 99.9% are scrapes and bruises.

M: Right, and there's not much you can do about that at the end of the day.

B: Well, there is, but, but we have to ask ourselves, what do we want to present to the world? Do we want to wrap all of our children in bubble wrap and let them live their lives in bubble wrap and helmets? I mean, that would prevent everything, and, of course, what if everybody drove their cars 10mph? You know, we wouldn't have any automobiles accidents either, would we?

[Laughter]

B: Nobody, nobody would die in car accidents if everybody drove 10mph. Just, just, think, it's so funny to hear these liberals say, "But if it just saved one life it would be worth it". OK. Well, then, they wouldn't want to drive 10mph. They don't give a shit about the life, they're just trying to [inaudible] shit.

[Laughter]

M: No, but I get what you're saying. Yeah, I agree with you, [intentionally left blank]. Yeah, I mean, you can take the two, I mean you could put it down on the ground, as well, right, but it wouldn't be any fun then either, right, so?

[Laughter]

B: Exactly. Exactly.

M: OK, well, [intentionally left blank], um, I've, I've just got one question left, really, and that's, um, what do you think the, the future looks like, in general, over the next 10 years or so?

B: Well, I'm, I think there's going to be plenty of growth and I think the winners in the industry are going to be the most creative people and, um, that's the way it always is, anyway in any industry. Um, I think in the next 5 years, well, not even that, probably in the next 2 years, we'll be the largest operator in the world, when you look at the numbers of people served as an operator and we'll be a huge world-wide brand. I mean, our company, right now our company, operationally and everything, is about 26 million, so I think in 3 or 4 years we'll be at about 50-60 million.

M: That's incredible.

B: And, um, I think that's about as big, I think, manufacturing-wise, 40 million that's about as big as we can get, but operationally, I think we can do several hundred million a year, operationally, that's what we're hoping for.

M: Wow. Those are just numbers that are completely, um, I didn't think we, you would ever be talking about numbers like that in this industry. I mean, that's just incredible.

B: Well, if you look at what we have, currently, in, in our beta site in [intentionally left blank], um, we're putting 185,000 people through in a year.

M: OK. OK.

[Laughter]

B: And, and, and that's in [intentionally left blank]. Now, you look at every major city. You know, there's ten major cities in Texas. There's, there's, um, you know, and you just do that number and if we're creative enough to make them all just a little bit different and have some repeatability, and we're working on that stuff, you know, those numbers are, um, let me see, 125 times [inaudible], um, my calculator doesn't go that high.

[Laughter]

M: That's always something, isn't it? That's when you know you're talking about some decent numbers.

B: If you have, if you have 125 units doing 5 million dollars a year, I mean, that's real, that's real money. And, um, we're working with [intentionally left blank], we're working with a lot of major retailers now and, um, there's a lot of, lot of things going on.

M: What did you call them? [Intentionally left blank]?

B: Mhm.

M: Oh, I'm not familiar with that. What's, um, just out of curiosity, what is it, sorry?

B: Um, you should look it up online. It's, it's an outdoor retailer. They sell boats and guns and fishing equipment and camping supplies. Those types of things. But, their, their shops are huge. 55,000sq.ft, you know, with 38-50ft ceilings.

M: Oh, so you're in their stores?

B: Well, we're working with them. We're just doing our first job now, but we're looking at a roll-out with them.

M: Wow. How many stores do they have?

B: Well, they have, they just bought Capellas, which was their largest competitors, so now they're going to have about 130 stores.

M: Oh, that's amazing, [intentionally left blank]. You need to write that book! I'm telling you!

[Laughter]

B: Well, maybe have somebody else write it. I'll just be the leader.

[Laughter]

M: Listen, [intentionally left blank], that's all I have. Thank you so much for all your time, um, I really appreciate it. I've really enjoyed the conversation with you today. It's been good.

B: Yeah, I haven't had a conversation like this in a long time. I appreciate it. Well, I hope I helped your little study and, um, I appreciate your help in the industry and, and, we're all trying to be safer and, um, the nice thing about this industry is, pretty much, 90% of the people are really good people that care and that's what I've always liked about this industry. [Inaudible] and wear Birkenstocks, we still care.

[Laughter]

M: Birkenstock. Well, they're in fashion now, again, so!

[Laughter]

B: Wait 20 more years, they'll be in fashion again.

[Laughter]

M: Yeah, no, [intentionally left blank], I appreciate it. Thank you very much and I hope you have a wonderful 2017 season and, um, have a great weekend as well.

B: Alright, well thank you so much. Bye-bye.

M: Thank you, bye-bye.

Call ended

Participant 17 Conversation

B: Participant O: Operator M: Me

O: Hello, this is [intentionally left blank].

M: Oh, hello is, um, [intentionally left blank] available at all, please?

O: Yes, let me see if he's in. Can I ask your name?

M: Marcus Hansen.

O: OK. Just a moment.

M: Thank you.

B: This is [intentionally left blank].

M: Hey, [intentionally left blank], it's Marcus. How're you doing?

B: Good. How are you?

M: Good. Um, is this a good time?

B: Yeah, it's fine.

M: Oh fantastic. Um, yeah, thank you very much for, um, opting in to take part in this study. Very much appreciated.

B: No problem.

M: Um, how's your day been? Busy?

B: Oh, yeah. It's a busy time of year around here, so. Just getting ready for a bunch builds that are starting up right now and making sure that things are heading in the right direction.

M: Oh, fantastic. Well, that's, that's, busy is good, right?

B: Yeah, it is good. Exactly.

M: OK. So, um, before we start, um, I just wanted to run through a, um, couple of reminders. Um, I'm, um, I am recording the call and basically I'll send a copy of the recording to you once we've finished tonight, um, or this afternoon.

B: OK.

M: Um, it is, obviously, all confidential, so, what I'll do once we've done the call, I'll start transcribing the call. Um, I'll leave out, obviously, your name and any other potential identifiers will be left out as well. Um...

B: Thank you.

M: Um, no, that's alright. And then once, um, once I've transcribed the call, I'll send a copy of the recording, um, of the transcription to you as well.

B: OK.

M: Does that sound OK?

B: That sounds great.

M: Fantastic. So, um, the flow of the, um, interview, or the layout of the interview is, basically, we'll start with some general, basic questions, then some questions on risk management and finally some questions on collaboration.

B: OK.

M: OK. Um, do you have any questions before we start?

B: Um, do you mind, I'm just going to go to an office that's a little bit quiet, so do you mind if I put you on hold for one sec?

M: No, of course not.

B: Awesome. Hold on, one sec, Marcus. That's a little better.

[Laughter]

M: No worries. OK, well, yeah, let's dive into it then.

B: Alrighty.

M: Um, so please tell me about your role within the organisation.

B: Sure. Um, so on paper, I am the chief operating officer, um, and I, kind of, moved my way in the company from, I was originally hired on as a builder, then became a lead builder, um, and then was brought into the office to do some gear sales management and, yeah, like I said, currently the COO.

M: Wow. So, you've worked your way all the way up?

B: Yeah and I would, I would say that, what I think is my job, because it, kind of, changes every day...

[Laughter]

B: Um, but our, our, um, our organisation has a lot of different departments. There's a training department, an inspection department, a build department, gear sales, facilitation etc. and, um, I see my job as making sure that all the parts are communicating with one another and also communicating with our clients. So, kind of, pushing projects forward, I guess.

M: Oh, wow. OK. So, um, it's quite a big operation then? Um, wow, OK.

B: Yeah, it is.

M: Um, now, do you deal with both, um, like do you build both commercial and educational purposes, you know the parks.

B: We do, yeah.

M: OK, yeah. Um, and how long have you been involved in the industry?

B: Um, in the industry, let's see, I think around 10 years and, um, with the company that I work for, I've been here about 4 or 5 years.

[Laughter]

M: That didn't take you long to reach the top, huh?

B: Yeah. Yeah, I guess so. Things have been moving pretty quickly. Um, yeah.

M: That's like a promotion every year, huh?

[Laughter]

B: Exactly.

M: Well, that's brilliant. Um, that's good, that's good to hear. Um, so, um, with regards to the, the aerial adventure parks, what do you believe is the key attraction?

B: The key attraction?

M: Mm.

B: Um, I would say the key attraction is that it allows for a certain level of independent exploration and learning, um, as opposed to a lot of the, like a zipline tour, for instance, is heavily guided and there's not, it's not very active, it's more passive on the part of the participant. Um, aerial adventure parks are, I think, a bit more challenging and a bit more involved. You know, it involves, it generally involves some unclipping and clipping, um, yeah.

M: OK. Um, mm, what, um, what role do you believe that the, um, this thrill seeking, or the, um, the risk taking plays in the overall attraction of the adventure parks? So, from the participant's point of view?

B: Yeah, sometimes it's hard for me to remember it from the participant's point-of-view, but, you, I think that's definitely a huge part of it. Most people don't spend too much time at height, if any, in their lives. So, I think, you know, putting yourself in a position, um, where there is a perceived amount of risk, um, but you're comfortable enough with the systems to trust that they work, that's kind of a best of both worlds situation, but I think that's a huge part of why people are interested in them.

M: Yeah, because it seems to me that there is a, the, there's an interesting relationship, if you like, with, um, risk to, um, the aerial, in the activity, right, because there's the customer who, obviously, wants to feel like they're taking a risk, but at the same time, um, neither party, you know, the operator and customer want, um, any actual, actual risk. Um, yeah, so when you think about that, how would you define risk, then, in this industry?

B: Hm. How would I define risk within this industry? Well, I guess, hm, that's a great question, an excellent question.

[Laughter]

B: Um, I think that, maybe, perceived risk is something that I would, a phrase that I would use, um, because I think that the participant wants to believe that there is a certain amount of risk to it, because then when they have done it, they feel accomplished. Um, you know, you've seen the t-shirts, like, "I've survived the rollercoaster" or whatever. I think there's a similar mind-set. Um, but you're right to point out, they wouldn't, they're not just going to pick up their stuff and go climb a rock face. They're paying to do this service, because, somewhere in the back of their minds, I think, they know that it's safe. Um, yeah.

M: OK. So, um, what do you think are the key challenges, then, that you face in risk management?

B: For participant safety?

M: Well, yes, or I guess, yeah, well, really in general, um, as a builder and, um, and so on.

B: Mhm. Um, particularly with aerial adventure parks, um, because there's the amount of independent play and exploration and, um, as I mentioned, often times, people are clipping themselves into belay cables and transferring from element to element. So, there's a, any time someone does that, I think that's a huge point of risk that has to be heavily managed and there's a few different ways to do that. Some sites opt for more, um, involved guiding throughout the process, so having a lot more guides up at height on platforms, monitoring people, spending a lot of time on the orientation before people actually get up on the course, making sure they know what they're doing. Um, but then there's also advances in the industry in terms of the equipment that our clientele are using that we provide our participants. Um, I can think of a few different devices that are called smart belay. This is where, yeah, where you can't, essentially, if used properly, you can't, um, come unclipped, um, and I think that is a huge piece of the risk management, because, if you're using it properly then, that point of transfer, when someone's going from element to element, you can rest a little bit easier knowing that you've got a back-up system in place.

M: OK. So, um, so, has innovation impacted, um, risk management, or helped risk management a lot then, do you think, over the recent years?

B: Certainly.

M: Yeah. OK, then. Do you think that also, to a certain extent, um, that also brings some challenges as, um, for existing courses that may have to change operations slightly, obviously, to, um, um, suit the, um, any developments that innovation does bring?

B: Yeah, I do. I think that's kind of where we find ourselves as an industry is because there are these commercial sites, um, newer ones, that are doing so well, that has the ability to invest in the more recent technologies available. Um, it's kind of becoming the norm, I would say, to have equipment like that. Um, so it's harder for the smaller summer camps, um, educational places to, um to make that leap, financially. Um, one, one thing that I'm noticing though is that, um, with, with those educational and summer camp-type courses, the turnover for staff is so high that, you know, every, every year there's a new course manager that the information about the course and, um, safety programs and all that staff isn't getting passed on. Um, so, in a lot of ways, I would say the up-front cost of investing in these newer smart belay technologies are certainly, they're expensive, but they're a lot less

expensive than the possible accident that happens, um, because people aren't as well trained as they should be.

M: Um, is that, is that something you're seeing in the aerial adventure course industry, as well, um higher labour turnover, or?

B: Um, not, not, certainly not as much as the summer camps or the educational places, but I do think, kind of, for the first time in the United States, there is a, um, labour pool of zipline guides and aerial adventure parks that, um, move from site-to-site, you know? It's like any kind of guiding job, like, rafting or whatever it may be. People are like, "oh, I was in Alaska last year at this course and now I am in Hawaii at this course".

M: Oh, brilliant.

B: Yeah, I don't think it was always that way. It's kind of a recent phenomenon.

M: Yeah, and, um, going back to risk management, what role do you think that the human factor plays in, um, in, in that as well?

B: Um, yeah, I think that, um, at the end of the day, um, we can build things, we can try to mitigate as many risks as possible, but the riskiest things that we will do is play with each other, play with other people, um, because no matter how smart your belay system may be, um, or how well-built your park is, at the end of the day, anybody can take their harness off in the middle of a course, if they decide to.

M: Yeah, very true. Um, just out of curiosity, um, when you build a course as well, um, do you consult the client on, on how to operate as well? Or is that not something you, kind of, delve into?

B: We do. I would say we spend as much time and resources, um, on the actual construction that we, as we do with the operation-side of things. Um, so, currently we will work, in the US here, we're following the ACCT, the Association for Challenge Course Technology, standards, um, excuse me, which, on the build-side of things, there's actually a few specific standards that say if you've made any, if you've built a new course or if you've made any major modification to a course, you are required to provide the client with certain pieces of documentation, um, and a lot of that has to do with operations. Um, so I would say, in addition to following those standards and providing what ACCT says, we kind of go out of our way to provide them with a complete policies and procedures manual, um, staff training, yeah, kind of, the whole, the whole gauntlet.

M: Wow. Um, do you operate as well, [intentionally left blank]? Is it, um, do you stick to building?

B: Um, we operate as well.

M: Oh, you do? Wow, OK. Yeah, OK, there's a lot going on there. Um...

[Laughter]

B: Yeah.

M: Um, so, um, so, well, I guess, bearing in mind what we've just talked about, what does effective risk management look like to you?

B: Effective risk management?

M: Yeah.

B: Hm. Yeah, so, I, that's a great question again. So, I think that specifically from my view of things and what my role is within our company, I see communication between all these different, between the client and the builder, between the engineer and the builder and the client, between the trainer and the builder and the client. Communication between all these people, um, in a transparent documented way is the thing that I think has the potential for the greatest, like, um, where the biggest problems can occur, so managing that process, in many ways, I feel like is the, is the way that we mitigate the most, um, because if the builders aren't communicating with the trainers who then go onto teach the client how to use it, it doesn't matter how safe you've built the thing if the people don't know how to use it in a safe way. Um, and then if the, you know, if the builders are in conversation with the engineers and the engineers say "there's only 5 people allowed on this platform" and the builder says, I don't know, "there's 10 people allowed on this platform". So, just, kind of, keeping all these, um, disparate parts connected through the whole process, um, is, I think, one of the most important parts in mitigating risk.

M: Wow, OK. Would you, would you describe, do you, so it sounds, kind of, like it's a, it's a, um, a very, um, all-encompassing, if you like, um, approach.

B: Yeah, holistic.

M: Yeah. Um, so, well, I guess, as you both operate and build, it might be slightly different, but, um, what procedures do you have in place, then, um, to, um, identify and assess and respond to risk, or new risks or potential risks.

B: Sure. Um, so we have a safety committee and the safety committee is comprised of one individual from, at least one individual, from each of the different departments. Um, and within each one of these departments they have their own safety procedures and protocols for how things get brought to that safety committee. So, um, so the committee meets once a month and brings up all these different concerns that have, kind of, made their way through the, the appropriate channels, um, up to the, the safety committee where we decide what to do about it. So, um, for example, one of the builds that we're getting ready for is going to take place in, kind of, a remote area, um, and one of the build-crew mentioned to their supervisor, um, the project manager, said "hey, we don't have any AEDs, Automatic Electronic Defibrillators, which are part of, like, CPR, and so the, the project manager documented that, um, and put it on the safety sheet that we have and sent it out as an email to all the people on the safety committee and then we met last week and now we're in the process of purchasing AEDs. So, it's kind of this pyramid shape I guess.

M: Wow. OK. Wow. And so, basically, that committee is, um, is very accessible as well, um, that, you know, everyone, well, it sounds like the manager just knew, instantly, that, "well, we need to get on to the safety committee for this".

B: Very much so, yes.

M: Fantastic. That's, um, you know, I've done, this is my 19th interview and this is the first time I've heard of a comm, safety committee, internally, that's amazing.

[Laughter]

B: Yeah, thanks. I, I really, like, I know everybody thinks they're the best and yada-yada, but I, I'm really proud of the fact that we, um, we take it seriously, because it doesn't really matter what you're building, um, or how many builds you do a year, as soon as someone gets hurt, that's kind of the end of everything for everybody.

M: How long have you been doing that? The safety committee. Is that something you've been doing for ages or?

B: Yeah, before my time, so at least, um, at least 5 years.

M: Oh, wow. OK. OK. Um, so you may already have touched on this, [intentionally left blank], but, um, what role or impact would you say that risk management has on the overall strategy of the organisation?

B: Yeah, I think that was, kind of, what I was getting at, is, um, like I said, none of what, none of what we do matters, um, if we had an accident and, and that's, you know, a participant on something that we've built for a client or one of our staff members when they're building or facilitating a program. Um, yeah, it's bigger than that. It affects the entire aerial adventure park community and that duplicity and etc. etc. So, I think we all know, um, you know, that you carry a hammer in one hand and a first aid kit in the other and just make sure that we have all the, all the ducks in a row.

[Laughter]

M: OK. Um, how do you think it relates to, um, the, um, the culture within the organisation as well?

B: I like to believe, and I certainly hope that it's true, that people are extremely comfortable presenting any concerns that they may have, um, and when they're feeling like something isn't being done perhaps as, as safely as it could be done, that there are channels that they're aware of and comfortable with for them to feel empowered to either make changes, um, or bring them up to the, the safety committee, for us to start the dialogue to be able to make changes. Um, yeah, I think it's a huge part of every one of our departments and something that we focus on heavily.

M: Um, OK. Um, so how do you monitor that the procedures that you have in place, that they're being followed throughout the organisation?

B: Sure, so, again, it's kind of like, the reverse, um, the reverse, reverse pyramid. Um, there's the, the, the members of the safety committee that are representatives from each one of their departments, um, they're kind of charged with making sure that the people beneath them, the employees, the facilitators, the builders, um, are aware of all the systems in place, um, and constantly, kind of, checking in on that. And then, um, each one of our departments have their own safety manual, so, um, when they're hired they're given a safety manual and on the last page there's, kind of, like a "I have read this book" signed copy thing. Um, and then, when, whenever our builders are out building, this is kind of an OSHA regulation that they have to do anyway, but they do morning meetings every meeting, or every morning, where they talk about safety concerns specific to the job that they're on. So, if they're in the middle of nowhere, they'll talk about where the nearest hospital is, um, whether it's raining, cold etc. Those get documented and then turned into the safety committee representative of that department and then it makes its way up to

the monthly meeting and then the chair, safety committee chair, will say, "Hey, where are those meetings?". And then they'll pull up the forms and, yeah, it's kind of like a checks and balances.

M: Oh, wow, OK. Um, and so you mentioned as well, that, um, there's some, you have to follow OSHA as well?

B: Correct.

M: Oh, wow. So, um, ACCT and OSHA as well? Um, OK. Um, so, and what lines of, um, you've already, we've talked a little bit about this, when we talked about the safety committee, but how would you describe the lines of communication between, I guess, management and the front-line staff, um, that you have, in regards to sharing knowledge on risk management?

B: Management and the front-line. Um, so like, the people, like myself in the office and let's say our builders. Is that?

M: Yeah, yeah, so, I mean, you briefly touched on when you talked about the AEDs for example, you know, they put in a request for that, um, when they were going to, um, you know that site as well.

B: Um, so I guess, um, one of the main ways is, like I said, if we're, if we're speaking about our builders, um, they have to fill out those safety meetings every morning and every morning, whoever's conducting the meeting, usually the lead on site, will say, um, "is there any other safety concerns that anyone has?". Those get uploaded every night, when they're done building, to a cloud-based system, um, and then the safety committee, or myself, checks that every night and prints it off and puts it into a notebook. Um, this notebook, we call it the Commissioning Report and it's basically every piece of documentation, throughout the build process, whether it's certification for the cable that we're using or the contract or these, um, daily safety meetings. Um, so basically instantly, I mean, 5 hours after they have the meeting, management knows what they were talking about. Um, yeah.

M: Wow, OK. OK. And so, and then you meet. OK. Sorry, I was just thinking out loud.

B: No, no. Not at all.

M: Um, um what, what role do you believe, then, that leadership plays in effective risk management?

B: Yeah, I think, I think huge. I have worked, I have worked for companies before in a build context, as a builder, where, because of the way things were, kind of, structured on the leadership end, um, it was like, it felt very much like, "you should know how to use these tools and if you don't, it's, kind of, your fault". So, like, it was, it was very much a don't, um, like, you were embarrassed to ask questions, right? Um, which, I think, we have done everything in our power to cultivate the opposite, which is, "even if you think you know how to use that, let's talk about how you think you know how to use that" and make sure we're both on the same page.

M: OK. Um, do you, do you do a lot of recurring training and so on, it sounds like?

B: We do, yeah. Um, we, and in every department. So, our, um, trainers have to be certified yearly, our facilitators have to be certified yearly, um, per ACCT standards, but also in things like CPR. Um, and then our builders, we have an on-going skills verification check-sheet that we, kind of, monitor as the year goes on.

M: Um, OK. OK. Now, um, looking at other stakeholders, um, such as the state and, um, I guess, the insurance provider as well, how do they influence risk management procedures for you guys?

B: Yeah, I know that, um, a lot of the things that we're currently doing, like the safety committee, um, the safety procedures manual, stuff like that, a lot of it comes out of different state, um, mandated things and then we usually end up learning from what they want and, um, making it, kind of, meet our needs and it, and then that really grows into something much bigger and useful for our company, um, like that, that commissioning report that I was talking about. Only a few, there's like 4 things that you're supposed to include for, per ACCT standards, but as we went through the process of doing that, in turn, we were like, "wait a minute, we should also be putting this in and this in and this in".

[Laughter]

B: So, it all, kind of, influences us, for sure, heavily, um, and then I think we usually try to go a little bit above and beyond of what we're asked to do.

M: So, um, have you, because I know that some states regulate, but not all, have you, do you know how many regulates, um, the industry?

B: That, you know, is a great question. I, I'm, from what I am aware of, is that currently there are two that are, um, pretty involved, two states that are pretty involved in the

regulation of, um, zipline tours in particular, um, but I, I know for a fact that there's a number of other states that are, right now, in the process of seeing what that's going to look like, um, for their state.

M: OK, yeah. So, um, um, have you built, then, in those two, um, states that you're referring to?

B: We have, yeah.

M: OK. So, do they, do you find they, um, do they come up with their own regulations or do they look to the industry, like the ACCT or ASTM or?

B: They do, um, look to the industry and, and, um, they have, um, they look to ACCT and then they also, um, ask, you know, industry professionals on an individual level, um, in consultation. I think certain states have had the experience of just going for it on their own and they've come out with these standards and then they've received a lot of opposition because have said "that's impossible. You have no idea what you're talking about" and then they say, "OK, well, let's talk about it" and then it becomes more of a joint effort.

M: OK. Have you found that, in your experience, as well, then, that, um?

B: Yeah.

M: Yeah? That you've had to, kind of, educate them a little bit?

B: Definitely. Definitely. And, it's been a great conversation, whenever it has happened. Um, I very much like to be a part of that process, because I think that there's a way to make things, I think there's a way to mitigate risk, make things work, set industry standards that are attainable and, um, desirable, you know, for all parties involved.

M: OK. So, um, how do you believe that an incident, then, at one park may affect the rest of the industry?

B: Yeah, um, I mean insurance can go up for anyone, um, and everyone if someone gets hurt, someone else, there's a lot in, in, in the customer and the client's mind. There's not a lot of differentiation between zipline tours, aerial adventure parks, rock climbing walls. It's all, kind of, stuff on ropes that's high up.

[Laughter]

B: So, and, and backyard ziplines included. You know, so if someone gets hurt on a backyard zipline that they built, um, with whatever kind of rusty cable and material that

they just had lying around, the news that come out is “person hurt on zipline”, right? Um, and there’s nothing in common between a backyard zipline and some of these commercial operations, but that doesn’t mean it’s not going to affect people wanting to go there and, you know, we’ll have people call after there’s an accident, before they’re booking their tours and say, you know, “is this safe?” kind of thing.

M: Is it, you just mentioned about the insurance cost going up, is that something that’s an issue in the industry at the moment with them going up or?

B: I think we’re, kind of, seeing the start of it, right now, yeah.

M: Oh, really?

B: Yeah, I think they’re looking, um, they’re not necessarily going up yet, but I think they are, the expectations are much higher of what they’re looking for at sites. Um, so they’ll say, “do you have our commissioning report?” “Are you doing these things set forth by ACCT?” um, as opposed to just saying, “cool, you built a zipline tour? Great. Let’s do it”. Um, they want proof of how you’re mitigating risk and, um, what you are doing to comply with ACCT standards.

M: OK. Is it still, is it still just the case of, um, I think, um, there’s like two major insurance providers, or is there some more?

B: That’s what I’ve heard. That’s what I’ve heard. I’m not too involved in the insurance process, but I know that many of the people in this industry are using, yes, just a handful of insurance providers.

M: Right, yeah, yeah. OK. Um, yeah, I was just surprised at that, um, in this type of industry, that there are only two.

B: Yeah.

M: So, um, [intentionally left blank], moving on to collaboration, then, do you, um, do you collaborate with other organisations in the industry?

B: Um, we do very much so and it’s something that I think, um, has its roots in the ACCT organisation in that it was a bunch of people that, um, got together for the purpose of, um, collaborating on best practices. Um, yeah, very much so, we do certainly.

M: Yeah. Um, and, yeah, so, sorry, what do you work, um, what do you collaborate on? Best practices, you were saying?

B: Yeah, best practices. Um, when there's new technologies available in the industry, we'll collaborate, um, on testing them and seeing, kind of, where their uses lie. Um, there's a lot of, um, vagueness to some of the standards that we all strive to follow. So, I know there's a lot of collaboration and communication on what we, as an industry, interpret those standards to mean and affective systems for complying with the standards. Um, yeah.

M: So, um, are you finding that, um, are you finding that you have to, kind of, work on your own interpretations of the standards then?

B: Certainly. Some of them are, are pretty straight forward, but a lot of them, um, you know, it'll, the standard will say, "provide" you know, "provide a commissioning report", but what that looks like, how it's delivered, um, a lot of that is up, up to, yeah, interpretation, um, and I think that different people have different ways of doing things and then whenever we collaborate, we go, "oh, that's a great idea" and it's a back and forth until the, the product is much better than the sum of its parts.

M: And so, do you, do you find that, um, that's an issue, or potential issue, when it comes to dealing with, um, states and insurance providers, um, in the sense that if it's left up to individual interpretation, they may have a different understanding of the standard than you do?

B: I think it could get there, but I think, currently, um, insurance is, kind of, looking at the industry experts, um, at what they're providing as like, as setting the bar, you know what I'm saying? They see something that looks great, and say "yeah, that's what, that's what the standards meant. You guys should have that".

[Laughter]

M: Oh, OK. Um, do you find that the insurance providers, are they quite knowledgeable, um, um, on the stuff as well?

B: Um, that's a good question. Again, it's a little bit outside of my purview, so I, I mean...

M: Oh, of course. I'm sorry.

B: No, it's OK. I, I would imagine that they are if there's only a handful of them working with so many clients, but I wouldn't, wouldn't know.

M: OK. So, um, on, on collaboration, do you, um, do you find that it's something that takes place a lot in the industry, um, or is it something that, I know you're very active in collaboration, but do you find that the industry, in general, is quite keen on it?

B: I do, yeah, I think they're quite keen on, yeah. Um, as I mentioned, this ACCT organisation, of which many of the biggest builders, um, and people moving the industry forward are members, is a very tight-knit group, um, with similar values and ideals. So, there's a lot of collaboration between the different, um, PVMs, they're called.

M: Right. So, what do you see are the benefits to collaboration, in your opinion?

B: Yeah, as I mentioned, I think that, whenever there is a standard, there is a bar that we're expected to meet, um, everybody has a their own interpretation of how to, um, achieve that and when we start to put our minds together, um, I think, again, the product is much bigger than the sum of its parts and we end up with something exceeds the bar and the standard and something that pushes the industry forward and, um, the ACCT conference, annual conference, is an excellent example of that. Some of the workshops there are different. Ideas are put forth and it turns into a discussion and are really exciting to watch for that reason.

M: Oh, wow, OK. Yeah. Wow. So, um, would you say that the, um, ACCT conference is, kind of, the, um, that's got a pretty good representation of the entire industry?

B: Yeah. Um, for better and for worse, it does. There's, yeah, I think there's a lot of educational summer camps folk that show up and in recent years with the, kind of, boom in the industry, there's been a lot of commercial folks, um, there as well. Um, yeah.

M: OK. OK. Um, so what do you believe is required for collaboration to work?

B: Oh.

[Laughter]

B: That's a great question. Um, mutual respect, um, number one. Um, honesty and a willingness to learn and make changes, willingness to receive, um, criticism, but then also give honest and productive criticism, for sure.

M: OK. And do you find that these requirements currently exist in the industry?

B: Say that one more time, sorry.

M: Do you find that these, um, um, what, what you just mentioned, trust and so on, do you find that this exists in the current, um, exists in the industry currently?

B: I, I do, yeah. I, um, am impressed by it, how much trust there is among some of these companies and their willingness to grow together, um, and be honest with one another in terms of what they're struggling with and what they'd like to do better at, for sure.

M: Mm. I guess it goes back to what you said earlier, as well, about how far back some of these people in the industry go as well, right?

B: Yes.

M: Um, but given that a lot of the stakeholders in the industry, and I guess this is perhaps more, um, on the operations side, a lot of them are small-to-medium enterprises, how do you think this may impact collaboration within the industry?

B: Hm. Um, I think that a lot of the smaller, um, organisations can find themselves in a tough spot, um, as more and more regulations are piled on. It's a lot easier to meet those regulations if you have the resources to be able to do so, obviously. Um, that said, the regulations are there for a reason and, um, if we collectively, as an industry, are a part of the standard writing process and we, this is how we meet that standard process, um, then I think there is a way for us all to meet those standards together in a way that benefits everyone.

M: OK. OK. So, um, the industry attacking it together, really, rather than individually.

B: Yes.

M: OK. So, um, one of the things I was, you, when you talked about the internal committee that you have, um, would you con, so I know you're already collaborating, so would you consider sharing on risk management with, um, your fellow stakeholders?

B: Yeah, more than just consider it, we currently do that.

M: Oh, you already do that? Fantastic. Um, and, um, do you think it would be beneficial to, um, create something like, I guess, something like what you have already internally, but something like, like an industry-body with the sole focus, sole focus, sorry, of improving risk management procedures within the industry?

B: I think that, yes.

[Laughter]

B: I think that would be extremely helpful. It might put me out of a job, but that's OK.

M: OK, yeah. Why do you think that, [intentionally left blank]?

B: That it would put me out of a job?

[Laughter]

M: No, that it would be good.

B: Um, I think it would be useful, um, because I think it would give a more formal structure to the conversations that are already happening, um, and perhaps put resources, I don't know where they would come from, but make more resources available for us to spend more time collectively as an industry, um, kind of trying to solve these issues together. Um, and I know that ACCT does, currently, have some procedures in place, um, and they definitely work to that end, but, yeah, yeah, we can always get better.

M: Yeah, sure. The reason that I ask is that I've recently come across a, um, um, this, there seems to be a, um, it may not be the case in your case, but, um, there seems to be a lack of, um, data, um, overall, for the industry. Um.

B: Yeah.

M: So, do you think also, um, the amusement ride industry, they have something called SaferParks, which is like a magazine, that, um, and I know we have the Adventure Park Insider and so on, but SaferParks, basically, focusses on any incident that's happened in the industry, um, and notifies, um, stakeholders, um, it is anonymous, but it notifies them, um, what's been learned from the incident as well.

B: That's amazing.

M: Yeah. Do you think that would be beneficial to the industry, um, the aerial adventure industry?

B: Certainly. Certainly. I, I think that OSHA has something like, some, kind of, unwritten rule, that if someone gets hurt, then you've done something wrong and I think that that's true, um, yeah, I think that that's true and the more knowledge that we have of what people are encountering, um, the better job we can do as an industry to mitigate that and manage it.

M: OK. Um, and you would consider implementing recommendations from an industry-body as well, so an external body, basically? Yeah?

B: Yeah.

M: OK. Um, do you believe that, oh, actually, you've already touched on this. Um, I was going to ask you whether you believe the industry collaborating with public agencies would be beneficial, but I think you touched on that earlier, didn't you?

B: Yeah. I definitely do.

M: Um, OK. Sorry, I'm just going through my questions, because, I think we've covered a lot of them through one, um, one question, so that's quite good, [intentionally left blank] actually.

[Laughter]

B: Alright.

M: So, now, um, do you think that, um, a lot of, well, the states are obviously working on regulating the industry on an individual basis. Do you think that's an efficient approach or do you think it should be more on a federal level or even more on a local level or how would you like to see it done?

B: Um, that's an excellent question. I mean, kind of, my gut response is to say that, you know, some kind of uniformity across the board would be excellent, um, but I'm sure there're situations where, you know, some kind of umbrella set of regulations is not going to, um, work for everyone. Um, but definitely, my gut instinct is, you know, a cable between two trees is going to be a cable between two trees, no matter if you cross whatever kind of state lines you want.

M: Sure. Do you, um, is it just that you're thinking that it won't happen, because of the, the size of the country as such and the many states involved?

B: No, I'm just, kind of, thinking that in certain circumstances there may be umbrella regulations put forth by and for the more commercial interests in the industry that will affect, um, the smaller educational summer camps stuff, um, like in an undue, irresponsible, sort of, way, um, I can envision that happening.

[Laughter]

M: Yeah, OK. I mean, I guess the industry is changing, I mean, the focus is so much more on the commercial side now, whereas, you know, it used to... that must be difficult as well for some of those, um, church groups and so on that have had ropes courses for ages and are, kind of, um, in the background now.

B: Yeah. I know, I know a lot of, I mean, I can think of friends that own sites in California and small educational places that have been around for 15 years and because of the commercial sites, in a lot of ways one could argue because of the commercial sites and zipline tours and accidents that have happened, California has adopted a set of operating procedures, um, and regulations for ziplines that these summer camps do not have the resources enabled them to meet, um, so they'll have to shut those ziplines down. That said, are the regulations good? Yes. Are they making ziplines more safe? Yes. Um, but, certainly, the end result is that the smaller people cannot keep up with the commercial regulation in a lot of cases.

M: Yeah. Is that, is that something you're seeing in general in the industry with, with smaller operations and so on, kind of, either merging or basically disappearing as it becomes more serious, if you like, or more intense.

B: Yeah, I don't know, I think, like, right now is when it's starting to happen, so I can't really speak of a past, um, that I'm not aware of, if it, if it has been happening, but I do know it's something that's in the air right now, um, like, currently.

M: Yeah. Um, and just, um, on the, on the standards, um, I didn't ask you this earlier actually, but, um, given that there are a about handful of different standards, do you think it would beneficial, um, for them to all be combined? Would that be more effective rather than having 3 or 4 different ones?

B: Yeah, you know, it's funny. It kind of contradicts my, um, state-by-state vs. federal thing. I, again, got responses that, I think it's nice having different standards and not combining them all into one, because I think there's, um, I think it's too much for one set of standards. I think you could write, you know, 15 500 page standard books just on building, um, and then there's the operations and then there's the material that goes into building. Um, so I think, kind of, diversifying all the different aspects into really specific set of standards and saying, you know, "this part of our course meets this standard and this part of our course meets these standards" I think is, or has proven useful for us.

M: Yeah. OK. So, do you, do you work to, with different standards then, um, as in, both the ACCT and the ASTM and the PRCA and so on or?

B: Yeah, we try to, um, work within all of them and when we have to we work with all of them that is definite. Um, yeah.

M: OK. OK. Sorry, I forgot to ask you earlier, [intentionally left blank], so that's why it just got thrown in like that.

[Laughter]

B: No that's OK. Not at all.

M: So, um, going back to, um, collaboration, you know, we talked about the, um, the external safety committee, if you like, um, what areas do you believe such a collaborative arrangement should focus on? Um, is it something you see focussing on, kind of, everything, like, operations, building, PPE or do you think it should be more focussed on just one aspect, really?

B: No, I think the collaborative aspects between all the different, um, departments is kind of what, I think that's the missing piece of the puzzle in the industry currently and I think we've seen some accidents, um, this year, where they had the right PPE on site, the builders built everything according to standard and the, um, staff were trained appropriately, but it was the miscommunication between all the three different things is where the accident, kind of, happened. Um, yeah, I, I think, I think the communication between everything working together is, is the piece of the puzzle that's currently, that we need to work on the most for sure.

M: OK. So, you're finding that, um, that, to a certain extent, there's a lack of communication, is that what you're saying?

B: Correct, yeah, between the departments. I mean, anybody can say, um, you know, "you're, my, my, the lobster claws that I am using on my course meet ACCT standards". Great. That's awesome. "Are you using the right lobster claws for a belay that's at 7ft?". Um, and I think, those are the kind of questions that aren't as obvious, because there's no standard for that, right? Is it rated to this amount? Um, we're asking the question, you know, "how many people did the engineer say are allowed to be on the platform?". And then that, that communication being passed on to the builder who then passes it on to the client. Um, the builder knows it's built to standard, the engineer knows it up to code, but if they have too many people on it, none of that matters, right?

M: Right. So, are, are there no operating standards, then, as such?

B: There are operating standards. Um, there are operating standards and I'm sure you're probably familiar with the ACCT ones, but I don't, I don't know that they address the way everything works together, um, yeah.

M: I see. OK. OK. Right, [intentionally left blank], I've just, um, I've just got one more question really.

B: OK.

M: Um, so going forward, what do you think the future looks like for the aerial adventure industry?

B: Hm.

[Laughter]

B: I am very excited, um, I really enjoy, um, I enjoy the fact that it's a new, newer industry, at least in the United States, and I think there's a lot of room for growth, not just in terms of how many there are, but how well we build them and how well we mitigate risk when building them and, um, operating them and, um, the future...

M: Yeah, you don't have to get your crystal ball out.

[Laughter]

B: Right. I just, um, I am very much a proponent of them as an educational tool and I am, as much as there can be things that are different between the commercial and the educational realms within this industry, um, I look forward to growth in a very intentional way, um, where we can still provide a meaningful experience that this industry, kind of, grew up with.

M: OK, yeah, so, you don't want to lose that touch, basically, that, yes.

B: No, exactly. I think there's a way that we can do both and I think that if we do both we're providing the best experience that we can.

M: Yeah. No, I think that, um, some, some parks have really added that, you like, in terms of, um, somebody I was speaking had, um, they were putting signs up about the local environment and so on, um, which I thought was really cool as well.

B: Yeah, that's excellent.

M: Yeah, that really is. OK, [intentionally left blank], you know that's all I have, really.

B: Alright.

M: Um, thank you very much, again, for taking time for this. Um.

B: Yeah, of course. My pleasure. Thanks for all those excellent questions. Good stuff to think about.

[Laughter]

M: No, no. I hope they were alright.

B: Yeah, definitely.

M: No, I appreciate it. I appreciate it. Um, do you have any questions at all, [intentionally left blank], for me?

B: I don't think so. I mean, you're, you're, what's the end goal with all this information? What are you using it for?

M: Um, it's, well, it's for a PhD and, um, I would, um, basically, I'm looking at how stakeholder collaboration can, um, improve risk management procedures within the industry as a whole. So, um, normally, um, in academia, normally when people look at risk management they've looked at individual organisations, so I am, kind of, taking more of a, like you said yourself, a holistic, um, approach to it and looking at the industry. Um, and then, um, yeah, talking about that, basically. So, we'll see how it goes.

B: Very cool.

M: But, um, this is my last interview.

[Laughter]

B: Oh, wow. Congratulations! That's great.

M: Thank you very much. Yeah, and then, fingers crossed, I should graduate this summer.

B: Well, good for you. Congrats. Congrats to you.

M: Thank you. Thank you very much, [intentionally left blank], and, yeah, I, I appreciate, um, like I said, you taking part this and, um, I have to admit I am very impressed with, um, the committee that you have and everything.

[Laughter]

B: Thank you.

M: No, seriously. I mean, in my research, when it comes to risk management, communication comes up all the time and, um, that's what you're talking about so much, so that's, um, that's very impressive. Yeah, I appreciate that.

B: Yeah, no, well, thanks, man. It gives my, it gives me something to do during the day, that's for sure.

[Laughter]

M: Yeah, for sure. Thank you very much, [intentionally left blank], um, and have a great 2017, um, season.

B: Thank you and I will look forward to that email from you.

M: Thank you very much, [intentionally left blank]. Take care.

B: Thank you. Bye-bye.

M: Bye-bye.

Call ended

Participant 18 Interview

B: Participant M: Me

B: This is [intentionally left blank], can I help you?

M: Hey, [intentionally left blank], it's Marcus Hansen. How are you doing?

B: Alright, man. Alright, let me close the door real quick.

[Laughter]

B: OK. I got a few minutes here. How long is this going to take, do you think?

M: Well, um, um, wow, you're a busy man, huh?

[Laughter]

B: Yeah, we're still, um, I didn't mean to mislead you, but I'm OK right now. We can go ahead.

M: Right, well, it probably takes about an hour. Is that, is that out of the question, [intentionally left blank]?

B: Um, well, I want to, it just depends on, if I got something else that comes up that's real important. You know, I'm not, I'm not, you know, I'm doing this to help you out and I don't mind doing that. So, what are we going to talk about again? Because, I know that we talked a few years ago.

[Laughter]

M: Yeah. Um, right, so, um, basically, um, I'm now on to a PhD and my PhD is focussing on how industry stakeholders in the aerial adventure industry, so the ropes courses and so on, um, how they can collaborate with each other to improve risk management procedures. So, obviously, you're a stakeholder as well as the public stakeholder, so, I'm looking, basically, I'm looking to see how the states can work with, um, the, the private entities in the industry, um, to, um, improve risk management in the industry. OK?

B: Well, well, the bottom line with us, the bottom line is we have compliance that, that we make sure that the rides are in compliance with our statues. And some of it, you know, we have a general inspection for all the amusement rides, go karts and water parks are different, but the, um, the, um, we basically, you know, we have a good clientele down

here in [intentionally left blank] that do a good job, um, we have quite a few aerial adventure courses. I can't tell you how many we have, but if you count the number of rides we might have 50 down here or more than that maybe.

M: Oh, wow.

B: Yeah, so. But, so, the industry they always keep us informed of, you know, what they're doing, any updates or upgrades they contact us and let us know so we can do an inspection. You know, and if we see a trend, if there's trends or issues, with anything out there, any type of amusement rides, you know, if there's any trend that we see, um, with a particular ride we get a hold of the manufacturer or get a hold of the owner to see what can we do to, to, um, cut the trend down, you know, and go karts, go karts especially. They're, they're, um, we have, um, a go kart manufacturer. Now, the go karts can be dialled up to ride faster, so, um, you know, we have karts that jump on top of each other, if you will, bounce on top, and it happens from time to time, but we've noticed that on certain karts manufacturers it's happening more frequently. So, what we're trying to do, and when you're saying "frequently", well, how many? You know, but it's only, we're only going to know that information if it's a reportable accident, means they were transported to a hospital.

M: Yeah.

B: So, you know, other than that they wouldn't know it unless they go to a hospital and that's the threshold for reporting an accident to us.

M: Oh, so they have to report to you if, even in the, um, the ropes courses and so on, they also have to report to you if there's a hospital visit?

B: Yeah. Yeah, correct. Yeah. If, and the threshold is to report, you'll say "well, do I report everything?" no, you only report when there's a transport. That means, mum, dad, anybody, it doesn't have to be an ambulance, but the parents, girlfriend, boyfriend drives them to the hospital then that's the threshold to report. So, that's how we deal with all the amusement devices and so, again, we'll analyse that data and we'll say, "gosh, we're seeing a lot of, um, issues with this particular area on this ride" or whatever it may be, aerial adventure course, go karts, certain carnival rides, merry-go-round. "Hey, how come this is going on? Why is this happening?". Is it isolated or is it continuing to happen with different companies.

M: Yeah, I mean, because, obviously, it's such a growing industry, with the aerial adventure industry as well. I mean, I can't believe you've got 50 parks there already.

B: Well, no, no, no, I don't know 50. I don't know if 50 would be a good number, but I would say we probably have 50 or 60 devices. So, we determine, we, we go do a courtesy to see, when somebody says "I have a zipline", well, is it two, three, one? So, we go out and try to be fair, because we have to permit each device separately. So, you can have, you know, you can have an aerial adventure course and it could be, um, 8, 8 separate devices. Um.

M: Yeah, so is it just, is it just the ziplines that you focus on or do you focus on the whole thing?

B: We do the ziplines, the ropes courses and the aerial adventure courses. So, it's a combination. You know, ziplines by itself, or ropes courses by itself or a combination, which is an aerial adventure course.

M: Yeah.

B: Which has the games and tricks and stuff.

M: What do you believe is the key attraction to these parks, um, [intentionally left blank]?

B: What's that, now? I'm sorry.

M: Um, no, that's OK. What do you believe is the key attraction to the parks?

B: Um, I think, um, a lot of it is, um, some of it could be, um, um, athletic, um, trying to get yourself in shape, um, see if I can, you know, bucket list, you know, people have bucket lists. "Hey I've never been on an aerial adventure course. I'm going on this and say I've done it", but then they continue to go on it. My son and his wife have been on the one here in [intentionally left blank] twice and for their anniversary they went on it.

[Laughter]

B: I said, "You went on an aerial adventure course for your anniversary?" and said, "yeah, and I said, "OK". So, but, um, yeah, I think it's just, um, excitement, um, the thrill to be able to go through these courses, to say that they did. I mean, some of these things are pretty strenuous. I mean, you've got to be hydrated. You can't, you have to have eaten something that day, drank plenty of fluids. You just can't go out there and think you're going to be Superman and then you get sick or, you know faint half-way through the courses. It's very

strenuous. Some of these things are very strenuous, I'm telling you. So, you know, and a lot of these people want the thrill and excitement and, um, also to get bond-building, I guess, you know, some of it could be team-building too, I guess. That's, it's, um, it's really something that's taken off in [intentionally left blank]. It really has. I can't believe how many places we have down here and there's indoor and outdoors.

M: Oh, indoors?

B: Yeah, oh, yeah, there's indoors, um, in the strip malls, strip centres. So, a lot of these places, like a bowling alley, um, um, go karts, down at [intentionally left blank] they put in a ropes, aerial adventure course. So, you've got a ropes course inside of a, um, indoor facility where the go karts are?

M: Flipping heck! Is that something you're seeing a lot?

[Laughter]

B: Um, well, they've just, you know, birthday parties and, um, they have a smaller course for the smaller kids, but, um, you know, up at these, the courses inside the building are obviously not as high as the ones outside, because you can only go so high, you know, the ceiling of the building. But, um, it's all over the place. I'm telling you, it's jumping leaps and bounds.

[Laughter]

M: So, um...

B: No, no pun intended.

[Laughter]

M: That's what made me laugh, yeah. Um, now, um, [intentionally left blank], and you just talked about the, um, about the importance of being hydrated, um, and all that stuff, but, I mean, what do you think are the key challenges that the industry faces in risk management, from your perspective?

B: Um, well, I, right now, like I said, we review our accident data and we don't see, I think some of the things that we have had happen, the most serious of accidents have been, you want to say serious, is, you know, um, not following directions. Once again, "yeah, I drank plenty of fluids this morning", but they didn't and then they get dehydrated and then they finally realise that, "you know what? I didn't really tell you correctly. I only had half a glass

of water. That's all I've had today". You know, "I didn't drink anything when I got up". But the other thing is, you know, once again, you're given instructions out here and they monitor. I think the biggest threat that they have is making sure that they monitor the patrons to make sure that they're following instructions, because you're up there and if they tell you you've got to, you know, disconnect here and reconnect here, they might have somebody up there with them, um, is it a continuous belay where you don't have to disconnect? That, that's even better. But, um, we've had some instances where people have wrenched their shoulders a little bit, where they're not, you know, they're, they're going down the zipline or they're trying to reconnect or, and they wrench their shoulders, but we don't have many of those, you know "my arm hurts". Um, or the other thing would be you bumped your shins on the platform when you come into to enter the platform. There's bumper pads there but they don't raise their feet like they're supposed to and they hit their shins, but we haven't really had a lot of those lately and we've found that those were really happening at certain courses that were owned by the same people and the same manufacturers too. So, we reached out to them and said, "look guys, what we have here working is not, you know, working", so those have really dropped, reduced drastically down. But, we didn't really have that many. So, you had one a month, maybe, and you're, yeah, one a month or two a month maybe. And then, but you want to, you, you gauge that against the hundreds of people that go there every day and then, you know, so is that really a trend? And who makes the trend? I do. I decide when there's a trend. And, you know, it's only when you say, "gosh, bumped shins, bumped shins, bumped shins. Well, gosh.". You just need to remember that. If you remember it then it must be happening a lot and then you go back to the data. But, to get back to your, um, I think the biggest challenge, I guess, is, um, their, um, writing the regulations, um, making sure that they're going to continue to be safely operated and, and have the best equipment out there for the patrons to use. You know, safety harnesses and things like that. The lanyards and safety lines. And, right now, we adopt the ASTM. We've done that for years. ASTM has an area now for aerial adventure courses in, in the ASTM International, theirs is an area. So, so, and a lot of that is being worked on with the ACCT, which is another agency, another organisation made up of manufacturers, operators from New Zealand and Australia that have done this for a long time and so they're cooperating with the ASTM committee to make sure that they have the right standards in there for operating.

M: Yeah, so, how does that work for, um, for you, [intentionally left blank]? Do, do you, is it a case of you copying and pasting, almost, um, the standards or, or do you tweak it a little bit to suit the state?

B: Well, we, we apply our own, our own standards first, they're general, then we go back to look at ASTM, which are not that in-depth. There might be two or three pages. So, say there might be 5 pages in total, front and back. So, it's five pages, if you will. So, we, we use the ASTM guidelines. We also go by the manufacturer. The manufacturer states, we always do this for all the rides, but if the manufacturer states "this apparatus has to be used, or this type of, um, harness has to be used or this type of lanyard or this type of connection point" we make sure that those are in good working order and they are using the ones that the manufacturer recommends. So, you know, we do that too. We apply those standards or those inspection requirements. Because, and it's easy. Somebody goes "we've never done a zipline" I say, "well, we're going to, let me see the manufacturer's manual. What do they require?". "We want the yellow, yellow safety harness", I'm just silly, but, "yellow harnesses". OK, are they yellow? No, they're red. Well, why are they red and not bright yellow?

[Laughter]

B: Is it different strength? Is it different material? You know, who's the manufacturer of it? Stuff like that. So, we apply the manufacturer's standards they outline in their book.

M: Oh, wow. So, so, how, how do you, or do you think that, has innovation affected risk management in the industry? Do you think?

B: Well, I don't know, well, like I said, nobody wants a problem out here. Now, we did have, um, we did have that fatality here a couple of years ago in, in [intentionally left blank], but it was deemed, I don't know if you heard about it?

M: I did.

B: But, it was deemed, um, manufacturer's defect.

M: Oh, OK, yeah. I didn't know about, that that's what they found out about it.

B: It was Ropes Course Incorporated. What they did, and like you said innovation, it was, they were trying to figure out, um, if you connected at the ground and go up to the ramp and you want to go on this ropes course that's made out of steel, steel, this overhead rail-system. So, once you connect in there, on the ground, you can't disconnect. So, they said,

“well, we have ziplines and you have to disconnect, we have to have a patron or an operator up there to monitor the disconnect, so why don’t we”, like you said, innovation, “put them on a rail-system that acts like a zipline?”. So, you could see from the ropes course into the zipline, also known as an overhead rail system. So, and it was a great idea, and we’re not engineers here. None of us are engineers, but we just look, we, we inspect and look at what you have and test it and that’s all we can do. Unless something sticks out, so outrageous you go, “hey, wait a minute, this thing’s not working right. We’ve got a problem here”, but, um, we never saw that and so, um, after a thousand of patrons had gone through there, this one gentleman pulled back as he, as he transitioned into the, um, overhead rail, also known as a zipline, he decided to pull back to get a running start on the platform, like a three-step running start, and when he pulled back, the puck assembly twisted and turned and came out the bottom, so he went off the back.

M: Oh!

B: I know and it wasn’t with a lot of force. It just, and he just pulled it just right that it, it turned and what happens is that there’s a puck assembly that you’re, that you’re riding in on a slot. Then, when you’re transitioning into the rail, Skyrail or the zipline, it, it transitions in about, um, 16 inches, it transitions the tong into the male-end, if you will, goes into the female-end and then the little tires end up hitting the bottom of the, um, they transition into the wheels that take you across, like you’re ziplining and what happened was he had done the bottom one and it was slow. He said, “I want to get a little faster, so I’m going to back up and run”. So, he got a three-step run and when he did, the pull-back, his equilibrium, his pulling back, the thing came out, he is, is, his equilibrium going backwards forced him off the top.

M: Oh, flipping heck.

B: And so, um, our, our investigation, along with the manufacturer and, and the [intentionally left blank] police department determined that there was a design, a defect in the design of that area. So, we closed it. So, they were trying to, they were trying to, you know, innovation, they were trying to make things better, or make it a little more feasible, I guess, where you didn’t have to disconnect or reconnect to get to, to experience a zipline, if you will. So, they said, “let’s come up with this rail”. So, now they’ve redesigned it and we finally opened it. There’s only one in [intentionally left blank] like that that has that, that transition, but once they got that put together, a year and a half later, then we opened it. Opened that. We opened the ride, but closed those areas off, out-of-serviced them. So, we

let the ropes course operate and then once they came back with new design, um, the engineer, um, then we re-opened it.

M: Oh, OK. So they're open again?

B: Yeah, yeah. The apparatus was closed for a day or two, maybe a week. Then they said, "can we open it with the understanding that we out-of-service the upper and lower Skyrail?" and we said, "yeah, we could do that". So, all you do is put two bolts in there. There's no way you can go through there with the overhead [inaudible]. You'd have to bypass it, but there's, there's, you know, there's a roadblock, so I'm going to go to the right. I can't go straight, so I'm going to go to the right. And that's what they did and we put out our service tags and everything seems to be working OK. They haven't had any problems with it. So.

M: Yeah, I mean they're massive, um, Ropes Course Incorporated. I mean, they, they must be, I, yeah, I mean the amount of customers they have is completely different to the rest of the industry, really, so...

B: Ropes Course Incorporated, I think they've been in business over, close to 25 years. They're not something overnight. And that's something else. We're very fortunate that a lot of the manufacturers that have come down here are very reputable and, um, they, they always reach out to assist us and help us in any way they can and they help us understand. We don't have a problem with these things. Some of the other states are afraid, it's because they don't know, they don't know what to do. And then, um, we don't claim to be experts, but it's like, "why do you want to make this so difficult, so hard. All you have to do is apply what your standards are and go back and look at the ASTM and look what the manufacturer requires.

M: Yeah, so how did you, how did you educate yourself in the industry, then, [intentionally left blank], um, so to speak?

B: Well, we have, well, about half of our 15 guys, about 7 or 8 of them know more about the ziplines and aerial adventure courses than the rest of the guys, but they have the physical attributes to be able to, um, you know. So, you have the guys who have a bad back, or knees or things like that. This isn't going to be something they can do, you know. And they're up in age. So, um, you know, but that doesn't matter either. You can have people doing these ziplines that are 70 years old.

M: Yeah, that's the thing. Yeah, definitely. Um, so, um, just going back to, um, to, um, risk management, [intentionally left blank], so, to you, I guess, as a regulator, what does effective risk management look like to you?

B: Effective risk management? Well, I mean, from our, coming from our point of view, um, once again, effective risk management is, is, I think that our accident, if you look at our accident data, how many reportable accidents do we have? Does that mean, does that mean we're doing a good job? I think we are. Um, we don't have near the issues. We inspect them twice a year, um, sometimes unannounced, but mainly, semi-annually inspections. And, um, have we found a couple of issues through the years? Yes, we have, but, and they've corrected them. But, there hasn't been a lot. We have a really quality, um, ownership down here. Quality people, that take pride in what they do and they're very knowledgeable and, um, you just, you just can't put a 16 year old on these things and say, "hey, go figure it out". You can't do that. They have, they have extensive training and, of course, they, they do training for the, um, for the participants. I mean, you don't just say, "hey, I want to go on this course", "well, have you ever done it before?", "no, well, but I want to do it now and I've only got an hour", "well, you have to go through 20 minutes of training first, or 30 minutes". They have, they have a, um, a lot of them will have a lower course where you can test it while you're a few inches off the ground. So, they're training you and showing you how to use the, um, the, the lanyard, the harness, things like that, how to connect, how to disconnect, things like that. So, you know, but I think that a lot of this has to do with the, um, the risk management part as far as, I think it really, a lot of it falls on us, obviously, but also falls on the operator. They're there 7 days a week, we're only there twice a year. So, and so, we look at what they do and we're going, [inaudible], this, this, it just snaps our heads back, so I think we're very fortunate and blessed to have the quality of ownership down here that operate these devices.

M: So, so they put quite a lot of, um, emphasis on the, um, both the participants and their staff training?

B: Exactly. That's, that's what they do. They put emphasis on that big time. And, um, that makes our job, to be honest with you, that makes our job easier, it really does. Now, we had, I can't mention them, but we had one that really worries us a lot, a manufacturer, and, um, we're watching them real close. And, um, if all of them, if all of them were like these people we'd be in trouble.

M: Oh.

B: So, and, what they're doing, I think, they're selling a cheaper product, um, and they're trying to, I know they're out there to make money and sell a product, but they're, I think they're undercutting the industry and lowering the price so they can sell their product and, you know, when our guys go out there and you're interacting with them, these guys act like they don't really know what's going on and that worries you.

M: Wow. OK.

B: Oh, yeah, but that's the only one out of all these manufacturers, it's the only one I have concerns with. We're watching them close.

M: So, do they build and operate or is it just a case of...

B: Um, they're, they're building and then they, they, they sell their product to, you know, an indoor facility or an outdoor facility. But, we've had, we've had a lot of problems with them, we really have, but they, unfortunately, fortunately, they don't have a lot of products setup yet, not a lot of devices. But, um, when you're going to, um, to use a, um, when you purchase a product and you think you're going to get permitted and the thing has already been erected, ready to go and you can't pass inspection, it takes you 3 or 4 months, that's ridiculous. That's absurd. I mean, and we've had 3 or 4 of these that's happened like that and it's the same manufacturer and I, and it goes back to, once again, they're not following their, they're not doing what they're supposed to. I don't think they're doing a good as, as far as, as far as training and reviewing their product with the new ownership, the people that are purchasing it from them, the customers. So, and I guess that's part of it, we have good manufacturers that train and, and, um, get their people, the customers up to speed on how to operate in a safe manner and how to, um, um, keep maintenance up to par, but, um, like I said there's one outfit that's just not that great. We have a bunch of, we have a bunch of A+ teams, if you will, or customers, or our customers, and this is, these people are C+ or B-.

M: Wow, OK. So, how, do you, I guess, I guess, you apply the standards and then, um, if they don't...

B: Yeah, we apply the standards and if they can't meet our standards... here's the thing, once again, if I make, if I make this apparatus, just say I make it out of [inaudible] material, we get there and the fasteners aren't even tightened and there's cracks on the material. It doesn't open. This brand, now, this is almost just bizarre. We've had two or three of these people that we've taken months to open them up. We've made numerous trips back there.

We've red-tagged the ride, or the device. It's just not operational. And then, eventually, we finally get them open. And, if I was the owner, I'd be upset. Not at us, but the manufacturer, because, once again, you know.

M: Yeah, but that's really, from, from your side, that's really good, [intentionally left blank], isn't it? Because, essentially, that's what you're there for, isn't it? To make sure that only the good ones open up, if you like.

B: Sure. Well, and I mean, if you have a fastener with a nut on it and a washer and the nut's not even tightened, it's just run down with your finger, or it's not even, it's not. I mean, some of the stuff is really silly, it really is, but it's the same, it's the same corporate over and over again, the same people, the same manufacturer. And, again, I can't mention their name, but it's not an, we're not happy with them, we're not and the only way to, to, to get their attention is to do our inspection and if it doesn't open, it doesn't open. That's just the way it is and then we go back and, you know, and, if we get calls, consumer complaints, say "hey, we're on this ropes course, or this zipline, they're running, operating in a dangerous...", then we're going to go out and investigate. We have to. We don't get that. We, we've had a couple of calls, but it had to do with animal rights. One of them was sitting in an aquarium or something. I think they wanted to put them out of business, because they didn't like the idea they had sea aquarium and so, they're reporting things incorrectly to get people's attention.

M: Oh, that's naughty.

B: Yeah, that is. Sure. That's the only one that comes to mind. The rest of them, we've never, we've never had any complaints and, um, people, yeah, so we're very lucky. But, we had the one fatality, we've had a few, one with the defect in the design and we had the issues with the, um, you know, the couple of shins being hit a few times and a couple of wrenched arms, but, my gosh, you're talking 1000s or millions of people that have been on these things down here in [intentionally left blank]. I mean, that's nothing, that's nothing. There's no trend here. I mean, you know, there's nothing to really speak of. Like I said, not to beat a dead horse, but we're very, very fortunate.

M: Yeah, I know, that's a really good record. I mean, I have to say that, of all the people that I've spoken to, I think you're one of the few ones that actually have a, um, a set of data to, um, to go to as well, because that's one of the issues that I've seen, so far, in the

industry, is that there are a lot of people saying, “we need more data to make decisions” or, um, and you have the data. That’s really good.

B: Yeah. Yeah, and what we do, we go back and look at it, but, like I said, our data doesn’t really show anything, you know, it doesn’t really show a lot, because, you know, we just haven’t, except from this one manufacturer, but we don’t have a trend to speak of anything out here. So, um, so, but we’ve very fortunate. We did, I’ll tell you, we did, um, with the help from a manufacturer, we did have one, a couple of zipline facilities that had the coating over the cables and they found out that it was deteriorating so, we had to close those whilst they replaced them, but, once again, they were on top of it. They knew and so they alerted us to it and, um, they had three facilities that they had to change the cables to a newer style that didn’t have the coating on it, because, once again, it appeared during inspection, you can’t see the deterioration on the cable. So, all those, so, once again, these guys were laying it forth and letting us know that they had a problem.

M: So, in terms of, um, I guess, internally, [intentionally left blank], because you said you have a handful of people that are, kind of, specialised in the ziplines and aerial adventure industry, um, what lines of communication do you have between the management and, and these people, um, the specialised staff?

B: Well, we, everything is scheduled here in [intentionally left blank]. So, everything, and so, everything is run through the bureau. If you’re scheduled to go to a specific facility to do an inspection and you alert the bureau of a certain operator that we have an issue, there’s an issue down here. And then, we do like we do with everything else, we, in turn, get a hold of the manufacturer. “We have a problem. We need some assistance in this”. So, um, but our people, um, they know, they all go to different ones, but they all know the operators out here and, um, and we have a good relationship with them. But, like I said, we have open communications with the bureau and our staff. So, I mean, yeah, you know, I don’t care what it is. We have our iPhone. You can take pictures, we can Facetime. “Hey, can I Facetime you? I want to show you something”. “Sure”. We’re, we’re in constant communication with our folks in the field.

M: Yeah. Do you have meetings as well, [intentionally left blank], I assume?

B: Oh, yeah. Yeah, we have meetings. We have every year. It used to be semi-annual, right now it’s just annual. But, we have training. And we go back and look at trends. We look at, um, um, the deficiencies found the previous year, previous fiscal year. Um, you know,

anything new, new bulletins come out. Everything is reviewed and discussed. So, any trends, like I said, we see a trend with this carnival ride over here, "hey, guys, this is the new information we have for this ride and this is the new inspection criteria we have for you now".

M: So, what, what role do you think, then, that leadership plays in effective risk management?

B: Well, you mean, their leadership or at the state?

M: Well, I mean, I guess, in general, so, yeah, it could be at the state. Yeah, at the state.

B: Well, first of all, I think the ownership does too, because they don't want to be, they don't want to have a bad track record, they don't want to have people injured. They want to have a good product. You know, they're down here to make money, they want to make sure that they run a safe operation and they have repeat customers. So, I think that, that to me is, um, and, and plus the training, but, nobody wants an accident. Nobody wants one. Um, a lot of the parks, they're very conscientious and they train their people, um, but you know, once again, it's, um, what do you call that term where you can't see the forest for the trees? Um, it's not that, but it's, um, oh, gosh, the term for where you do the same thing every day.

M: Oh, it's repetitive. It's, um, it's, um...

B: You become, you become...

M: Complacent!

B: Complacent, that's it. That's it, yeah, complacent. So, you've got to make sure people don't become complacent and that's, that's difficult, because we're human and it can happen. So, you know, our driving habits, you know, I don't pass as much as I did when I was a young kid, I don't take the chances. But, to come from the state's point, I think, you know, we, that's our job to make sure that these rides are assembled and maintained as much as we see them. I mean, carnival rides we see every week. The parks we see once a year. That's the statute. So, we don't see them as much. But, you know, even with the carnival rides, you see them once a week, I mean, once a setup, you don't necessarily see the ride completely disassembled. So, the owner, the onus goes back to the owner, because he sees that ride, his people, everyday, 365 days a year. Especially, if they go from up north down south. So, they're operating more than just half the year, but when the

weather goes bad up north a lot of them close up, some of the guys come to Florida, Texas, California to operate year-round. So, the onus is on them. So, we had an investigation we completed not too long ago and, and, there was no [inaudible] that we could, we found that 3 or 4 contributing factors caused the accident and we decided that three of them, maybe the owner may not have known or looked there, because there was no inspectional requirement by the manufacturer. However, one of them he should have looked at, simply because when the ride is disassembled he sees it every time. He should've seen the wear. You know, with us, we can't see it, because it's already been put together. So, you know, so, we deemed, we deemed that it was an operator error, as far as not, um, doing his daily inspections in that area. He could've seen it.

M: Do you think that there was slight complacency from their side, because they see it all the, you know, they're so used to it.

B: Oh, yeah. Sure it is. Well, those guys operate a little differently. They're fatigued, they're tired, they're dismantling everything and moving to a new spot and reassembling. So, they're fatigued more than a park would be. A park, they don't operate quite the same. You know, I used to do it. When you come from the carnivals to the parks, it's a different operation.

M: Yeah. Now, in terms of the aerial adventure industry, how do you think an incident at one park might impact the rest of the industry?

B: Well, there again, it depends on what the accident consists of. What caused it? What was it? You know, so you'd have to go back and look. If it's a component that failed, what type of component was it? Was it a, you know, you have different manufacturers that put these, that manufactures these components. So, one component on this might not affect the other.

M: Oh, OK. I see, yeah.

B: So, you know, it's the same thing we do with a swing ride. We used to, a long, long time ago, there was an accident on a swing ride and we shut all the swing rides down. "Well, wait a minute, first of all, what failed on this particular swing ride and who was the manufacturer of it?". Because, this component failed, does that mean that that component over there on the other manufactured swing ride is the same? No, it's a different material. It's not put together the same. Now, if it's the same manufacturer, and we do that anyway, so, if we have a, um, say it's Merry Go Round made by Chance, if there's a failure on this

one we're going to make sure that all the Chance Merry Go Rounds have been looked at as soon as possible, right away. Because we've had a failure here, does it affect other Chance Merry Go Round? Yes it, yes it does.

M: Right, OK. Right, OK.

B: So, the same thing would be, would hold true with the aerial adventure courses and the same thing with those cables. If you have cables that are wrapped with, um, um, plastic, if you will, or rubber coating around it, how many others do we have like that? So, we have to go back and research that. How many other aerial adventure courses have a wrapped cable with coating?

M: Oh, right. Is that something they do?

B: In that, in that, in that respect, excuse me that would affect all of them. You can't say that, "because I got rubber coating on this cable manufactured for this person, but I've got rubber coating on this other one and it's a different manufacturer, it doesn't matter". In that case, you'd have to see all of them. So, you have to do some research, you know.

M: Yeah, to determine whether it's something that's going to have an effect on the rest of the parks. Yeah.

B: Yeah, and, again, it depends on the component. So, the aerial adventure courses, like I told you about the coating that would affect anybody. So, you've got company A, B, and C, each one of them has two or three of those rides down here and they all have to be closed until we get to the bottom of what they look like and we want to go ahead and remove the coating and put new cables on there.

M: Yeah, for sure, yeah. Oh, right, OK. Oh, I understand now. When you first said about the coating, I wasn't sure what you were referring to, but I understand now.

B: Yeah, it's like, it's like a rubber coating that went around the cable and some of them had those on them and we found out later that it was not a good idea, so we took them off.

M: Oh. And, why did they put that on? Was it to protect the cable, or?

B: They thought it was to protect it, but all it was going to do was eventually, um, make the deterioration [inaudible] when we came to do the inspection, the deterioration signs.

M: Oh, that's interesting. So, that's almost, um, an innovative approach, isn't it, that's actually backfired, unfortunately.

B: Yep, it is. Yeah.

M: Oh, that's a shame.

B: Good intentions. Good intentions, but it backfired yeah. Unintended consequences.

M: Yeah. Yeah. So, [intentionally left blank], I think you've briefly touched on this as we've been speaking, but, how do you collaborate with the private stakeholders in your state, in terms of the aerial adventure industry?

B: How, how do I collaborate with who, now?

M: Um, the private stakeholders. So, the operators and the manufacturers and so on. How do you collaborate with them?

B: Well, you know, once again, like I said, um, we just, we, we, we don't have meetings or anything, but we, um, we have a, you know, one-on-one working relationship with them. A lot of them, all of them have my cell phone number, so they can call me seven days a week. So, if the offices close at 5 and they have an issue at 7, they call me. Yeah, so we have a, we have a, you know, I told them, "You know, I want to know about anything that comes on. Don't, you know, don't ever be afraid to ask a question or to give us some information, we're going, we're going, we're going to want to know what you know or give you an answer or, you know, if there's an issue. So, yeah, we, we collaborate that way. We just interact. They call the office, but most of them call my cell phone.

M: So, that's quite an open-door policy with the, um, with the, um, with the private stakeholders as well, then, it sounds like.

B: Mhm. Yes. And, um, we have, and we have, here's the other thing, if we have a question with somebody, we had a couple of goofy things that tried to happen here in [intentionally left blank]. Some guy tried to open up a zipline where he would zip from a platform on a barge into the water.

[Laughter]

B: And I said, "Wow, wait a minute". So, I reached out to four or five different customers of ours and asked them their opinion. I said, "How am I going to address this?". They gave me their opinion and so, luckily the guy went away. He just didn't do it. I said, "What's your brake?" He said, "The brake's going to be the water". I said, "You're going to have people going, hitting the water and that's their brake to stop them?". I said, "You're going to have broken legs" and all kinds of issues are going to happen here. They were going to anchor it

in the water and then they'd have to take it down every night and put it back together. I said, "We're going to have to re-inspect it then. If disassemble it, it has to be re-inspected". He said, "oh my gosh". So, I think he realised that he had bit off more than he could more than he could chew, if you will, do he decided not to do it, thank goodness. But, I reached out to them for their input and they said, "[intentionally left blank], this is nuts, crazy" and they said, "let's see what the guy does". So, I sent him a copy of a manual and I said, "You're going to have to create a manual for this thing. Here's an example of what we'll receive" and I think that he saw that and he goes, "oh my gosh, this is too much work. I can do something else with this barge".

[Laughter]

M: Yeah, that sounds crazy. Yeah.

B: Yeah, crazy. But, but we have that working relationship and a lot of them know that you come to [intentionally left blank] you're going to know that we do have information and we do have knowledge of the aerial adventure courses. So, um, it's been well established, so a lot of them come down here and they know that we're going to be, we're going to help, we're going to, um, the permit process with [intentionally left blank] is going to be easier than with anybody else.

M: OK. Do you find, are you aware of any levels of collaboration within the industry?

B: Um.

M: Do they talk to each other?

B: I think they do. Some of them talk to each other, yes. Some of the manufacturers down here, some of the bigger owners, they talk to each other from time to time. You know, it's a smaller industry down here, so they seem to know what the others are doing.

M: OK. Yeah, OK. So, um, in terms of, I guess, collaboration, um, what, what are the, do you see any benefits to, to collaborating with each other?

B: Well, yes, I think that we're sharing information. You know, they're sharing information and give us their, their ideas and I don't think they're trying to put somebody out of business, but they'll say, "hey, this is what we've found, we want you to be aware of it", um, blah-blah-blah, you know, "we're here", remember like I said with the carnival industry, "we're out here operating this thing every single day and we've found this problem we want you to be aware of it" or "we want to change something, we want to

modify and we want you to know about it” or “we’re asking your permission” things like that. So, these guys really come to us and really, really good to work with, they are. So, I mean, they won’t make a move unless they call us, a lot of them, I mean, they just don’t. And, um, you know, yeah, so, you know, and not that we’re a hundred percent experts on this. We learn something new every day, but these guys are the experts and I know the ones that do a really good job and some of the others that buy the product and have indoor, you know, family entertainment centres, they’re not having to do any changes unless they go to the manufacturer themselves. Like I said, there are some that are manufacturers and operators themselves, so, we’re very fortunate to have them. But, like I said, hey, it’s an open-door policy and then we exchange ideas all the time.

M: Yeah. Is that, so, um, how do you learn from the industry itself, then, [intentionally left blank]? Is it just through chatting with each other and seeing what’s going on and so on?

B: Right, yes.

M: That’s brilliant. That’s really good. So, what do you believe is required for collaboration to work?

B: Well, I, well, once again, it’s, it’s everybody having, I think, everybody having the same common goal to, um, make sure that the devices are being operated in a secure manner, um, repeat business, but, um, I think that, um, having an open-door policy and being honest with each other, that helps a lot. You have some people out here that have the attitude that, “hey, I know more than you do. You can’t tell me anything”. When you have that type attitude, it makes it difficult to exchange information, things like that, and there are some people like that. Not so much in the aerial adventure courses, but in other industries, you know, other, carnival companies and stuff like that and they’re kind of a little bit difficult to deal with. I think, respect, respect has to do with a lot of it. If they respect you. And, um, I’ll tell you, when I first came here 24 years ago, I was told by a previous predecessor that worked here that said, “look, once you’ve been here a while and the industry understands you and knows you and knows what you’re about they’ll share information with you” especially the lower, you know, the actual workers. This is the carnival industry, not so much the aerial. They’ll share information with you, they’ll tell, they’ll show you things. “This is what we found”. But, it’s not so much the ownership it’s going to be the, the privates that operate the rides and move them. So, once they know you and they trust you, maybe there’s a level of respect they’re going to share, share information with you.

M: Oh, OK. Where, where did you come from, [intentionally left blank]? Just out of curiosity.

B: What's that?

M: What did you do before?

B: Before here, um, I, um, I was a chef. No, I'm just kidding.

[Laughter]

B: Two eggs, over-white.

[Laughter]

B: No, I, um, I have a mechanical background. My father had, um, we had two salvage yards, two truck-stops, um, a seafood business. So, I'm really, I'm not bragging, but I think one of my attributes is people. I can interact with people and I'm a good listener and, um, obviously, I like to talk and then I'm a caring-type person. So, if you care about things it's usually going to work and the industry knows that, and if you're fair, if you're fair with everybody, to a degree. When you say "fair", do you go give them a deal? Well, it just depends. My knowledge gives me that, um, affords me that opportunity to give somebody a break if I consider it not a safety issue at this time. So, you know, you know, um, that's why the inspectors call me. We discuss something and if they go off and want to close something I say, "Well, let's talk about this first. What are we talking about here? What's this thing? What does this device do? What's this area going to do? What's going to happen here? Um, is the ride going to fall down?" "No, it's not", "well, does this need to be corrected?" "Yes", "so, well, alright, we'll see about getting it corrected, then". And, of course, I already know, because I've been, you know, I have some experience inspecting for years. But, I came from a mechanical background and then, um, and then management so, and I, you know, was inspector when I first came here 24 years ago, so I worked my way up through the ranks, you know.

M: Wow. Well, I think that's amazing, [intentionally left blank].

B: But, let me get back to collaboration real quick, just to, kind of, nail this down. What really helps with collaboration, I said, respect, respect the industry, respect the industry and the, um, the inspection authority, respect, honesty and, um, care and, and knowledge. You know, I think that, that all helps and you [inaudible, but most times, like I said, I pride myself to make things work for people. We try to get to the route of the problem. What

can we do to solve this so that everybody is going to be happy at the end? And it doesn't always work out that way, but we try our best. And that's not just the aerial adventure courses, that's the whole industry.

M: Yeah.

B: But, I think the aerial adventure courses that we have, they're a little bit better clientele. They don't seem to be under the gun as much. I mean, they're open every day, they don't move around a lot, they don't move around a lot. They're a permanent facility. So, they don't have that pressure of having to assemble and reassemble something every week. That puts a lot of stress and, um, on your folks and on the ownership. You know, you have all these events to take care of. It makes it tough, it really does. So, I think if you have a permanent park, yes, there's going to be stress, you have payroll, you want to make money, you're trying to improve your park, you know, repeat business, things like that. You know, you're dealing with people, you're employees, stuff like that, and of course, your customers, but when you get into the carnival industry, I think that that's a different animal all together. Not only do you have all these things that I've just mentioned, you have the stress that you're folks are under, because they're tired, they're around 7-days a week, um, they don't get many days off at all. I'm not trying to feel sorry for them, that's just the nature of the beast. It just makes it tough for them.

M: Oh, wow. OK. So, um, you said before, [intentionally left blank], you know, about the, you, you have the ASTM standards. Um, did you say as well as the ACCT or?

B: No, no. We don't want to, you see, we don't want to adopt the ACCT, because I feel like if we do, right now, we'd have a, we would have a, I don't know how to say it, but if ASTM says this and ACCT says that, you don't want something interfering with the other.

M: Would it be better if there was just one standard, do you think?

B: Well, it might be, but the ASTM is trying to, and it's going to get better, and the ACCT is working with them close, so, they're going to write some more standards in there. But, I think we feel comfortable having the ASTM right now. I doubt we'd ever have both. I don't think we have to adopt both, because they could overlap with each other, interfere with each other. This one says this, this one says that. Which one are we going to go by?

M: Yeah, that's what I've heard as well, just from my research, that it's because of, you know, there's 3 or 4 different standards and they're all open to interpretation and sometimes it's easier if there is just one.

B: Sure.

M: Um, but another thing that I've come across in my research, [intentionally left blank], and I don't know how or whether it relates to you guys, as such, but, um, but there is talk of, um, creating something like an industry body for the entire industry, with the sole focus of risk management, um, almost like a forum, if you like, like SaferParks that the amusement rides have. Um, do you think something like that is, um, beneficial to the aerial adventure industry? Because, obviously, it's quite young.

B: Oh, I think it would, sure. Anything like that would be good for any industry like that, you know. I think it would be, for sure. I think it would be beneficial. I mean, once again, it's all about exchanging ideas, um, giving information, exchanging ideas and information, um, any trends. All of that is very important, it really is. So, you know, it really is.

M: That's cool. Well, [intentionally left blank], I've got one more question and then I'll get out of your hair.

[Laughter]

M: Um, what do you think the future looks like for the aerial adventure industry?

B: I don't know. You know, you always hear stories. Like the bungee, when the bungee came out it was like a flash in the pan, if you would. Like, I mean, it just got too cumbersome, I guess. I think that, I don't know what the future is going to bring. I always worry because people are sinking a lot of money into these things down here in [intentionally left blank], a lot of money. The land, the product that they're going to install. Um, there's a lot of money installed that goes into this. It looks to me like, it's young, um, it looks like, to me, like it's going to stick around. I mean, they're not going anywhere. I think that as long as there are folks out here, um, that are going to do this, um, for the various reasons. I mean, it's physical, I want to keep my physical attributes going. You know, this is fun, it's exciting. But, how many times can people go back and do the zipline or ropes course over and over again? Are they going to get tired of it? I don't know. You know, it depends on the population too. Um, in [intentionally left blank] we have the [intentionally left blank]. It's going to get the big test. I mean, we're small. Not a lot of population. 175,000 here. But, you talking about a lot of people around this area, besides [intentionally left blank]. The test is going to be [intentionally left blank]. You get a lot further down south, there's a lot more population, but they're starting to pop up a lot. So, you know, I

always worry. I think, “gosh, is there enough to keep all of these places open?”, but I think they are. It looks like they’re really booming.

M: Yeah, it looks like it.

B: Right now.

M: Go ahead, sorry.

B: Right now, I’d flip a coin, saying “I just don’t know, but it looks like, to me, that these are going to be around for a long while, unless something really bad happens”.

M: Yeah, it looks like they’re popping up everywhere now, doesn’t it? In the cities as well.

B: Well, here’s the, here’s the issue down here in [intentionally left blank]: I’ve seen more growth, in the 24 years I’ve seen more growth in the last 10 years than I have seen ever at parks. I’ve never seen so much growth. It’s either new facilities being built or adding to the existing facilities. I can’t, I can’t believe the growth. It’s unbelievable. This last year, year and a half, it’s un, we, I’m dealing with five or six people right now with new construction. Um, and there’s more to come. I mean, just in the last couple of weeks.

M: Wow. Right. But, why do you think that is?

B: I don’t know. It’s just the population, um, the people. See, it used to be that we had, you know, two go-kart tracks open up and one closes. Three parks open up, two closes. I don’t see anybody closing! There might be one close after ten open, maybe. But, I mean, there’s nobody closing up. So, I mean, it’s crazy. I don’t, I don’t know what it’s all about. I, people are spending money. Well, you know, everybody comes to [intentionally left blank]. They all come here. But, you still have the people who live here, you can’t just go by the tourists. You have to go by the, you know, the folks in the state to spend their money. Of course, we have all the theme parks in the middle of the state, good gravy.

M: Yeah, we’re going there this September.

[Laughter]

B: Exactly. So, we have everything down here and there’s more being built. I don’t know, I don’t know what I’d contribute it to, but it’s crazy. I’ve never seen this much growth.

M: But, I mean, that’s good news, though, isn’t it, [intentionally left blank]?

B: It is. Oh, it's great. No, no, it's great. [Inaudible]. So, sales tax, things like that, so they love it. But, they're all, if they come to [intentionally left blank], if they're tourists especially, they're spending money, um, as a whole, but then, of course the folks in [intentionally left blank], they're spending money. So, like I said, locals here, [intentionally left blank], they're going to use their aerial adventure course here. There's three of them. They have three rides. Three devices there. So, and they seem, I haven't talked to them lately, but they seem to be holding their own, so...

M: Oh, right. Is that, how recent is that, [intentionally left blank]?

B: Oh, it's been open for four or five years now.

M: Oh, OK. Alright.

B: Well, no, the museum's been open for a long time. 30 or 40 years.

M: Oh, yeah, I mean the ride. Yeah. Oh, OK. That's what I've been seeing as well, that they're opening up in conjunction with museums and the zoos and so on as well. Yeah, the sky's the limit it seems.

[Laughter]

B: Exactly. Exactly.

M: Right, [intentionally left blank], that's all I have. I, I won't hold you any longer. Thank you very, very much for doing this. I very much appreciate it.

B: Alright. Well, thanks. I'm sorry, I'm sorry it took so long. We've just, we're just starting to slow down, so it's getting a little bit easier.

M: I get it completely. I'm just, I'm very thankful for you taking the time to do this, [intentionally left blank].

B: OK, and I enjoyed it. I appreciate it. Have a great rest of the day, OK?

M: Thank you. Take care, [intentionally left blank]. All the best.

B: Yes, sir. Bye. Bye-bye.

M: Bye.

Call ended.

Participant 19 Conversation

B: Participant

M: Me

B: Hello, this is [intentionally left blank].

M: Hi, [intentionally left blank], it's Marcus Hansen. Are you alright?

B: [inaudible].

M: Good, good. Sorry about this. Um, is this a good time to talk?

B: Yeah, that's fine. I'm just driving.

M: Oh, that's cool. OK. Easy enough. Um, right, well, thank you very much for, um, choosing to be a, um, part in my study. Um, I know it's a couple of months ago since we, um, originally spoke about this, so I just wanted to go through what my study is actually about, again, um, in case you've, um, yeah, because of the time. Um, so, I'm looking at how industry stakeholders can work together to improve risk management for the aerial adventure industry. Um, and that's basically what we're going to be talking about today, um, collaboration and risk management essentially. Um, does that sound alright?

B: Yeah.

M: OK. OK. Um, now, um, before we start, um, I just want to remind you that I am recording this call, um, but I will send a copy of the recording to you after we've spoken, um, today. It's just so I can record, um, so I can transcribe the call and then, um, I can do the analysis that way, essentially, but anything, um, identity-wise, like your name and so on, that will all be left out, [intentionally left blank]. Um, so, you know, you don't have to tip-toe around what state you're from or whatever, if that comes up I'll basically edit it out and I'll send a copy of the transcript to you as well, once I've transcribed the call. So, does that sound alright?

B: OK. Yeah.

M: OK. Fantastic. Um, do you have any questions before we start?

B: Um, no, I don't think so.

M: OK. OK. Well, let's dive right into it. Um, please tell me about your role within the organisation.

B: Um, I actually have two organisations. Um, I own two companies. Um, one is [intentionally left blank] and that is a, we're a Professional Vendor Member of the ACCT and we design, install, inspect, um, train aerial parks [inaudible] ropes courses. Um, and then I own another company that is an aerial adventure park.

M: Alright, OK. Oh, so you own and operate? Sorry, you build and operate?

B: Yeah, yeah. Two different companies, but yeah, we do everything.

M: Oh, wow. OK. Um, and how long have you been involved in the industry for [intentionally left blank]?

B: I started working on ropes courses in 1993.

M: Oh, wow. OK. Yeah.

B: So, a couple of years.

[Laughter]

M: Flippin' heck. Yeah, that's brilliant. So, um, yeah, that's, that's pretty much since the ACCT started, isn't it?

B: Um, yup, yup and [intentionally left blank] is a founding member of that association.

M: Oh, wow. OK. OK. So, are you on the board then, [intentionally left blank]?

B: Um, I'm on the board of directors currently. Um, last year I was Vice Chair, last year I was Treasurer and this year I'm just a normal board member, but, um, it's, I think this is my fourth year serving on the board of directors for ACCT.

M: That's brilliant. Oh, brilliant. Um, so, um, now, do you, um, when you, obviously, the park that you own, I assume it's, it's for, it's a commercial park, as such? Not the, um, educational-based park?

B: Correct. It's a commercial aerial park.

M: OK. Yeah. And do you build commercial parks for other people as well?

B: Yes.

M: OK. Brilliant. So, um, looking at the aerial adventure parks, what do you think is the key attraction to them?

B: Um, I think the fact that they're self-guided, um, you don't have to put up with an, with an instructor being within range of you at all times, like at a zip-tour. Um, it's more interactive. Um, you know, on big ziplines people can often be, they can feel like just luggage, you know, they, they don't do anything. They just sit down and fly across something. Um, on aerial parks they actually get, you know, they interact and be a lot more active, um, and I think the price-point between a zip-tour and an aerial park is a big deal. Um, usually because of staffing and because of the guides and the ratios you need, um, the zip-tour prices have just got to be higher than aerial parks. Um, you know, so it's a more affordable option for people.

M: Yeah, I've been, um, quite, um, amazed at that as well. I've seen some zip-tours that are around \$100 per person and then you've got an aerial adventure park, which seems to be around \$50 per person.

B: Yeah.

M: Yeah. Um, so, um, I guess, what role do you think that this, this, this thrill-seeking, um, plays in the, in the overall attraction of the aerial adventure parks as well?

B: Um, I think people want to do something cool like that. Get a little bit of an adrenaline rush. Um, you know, I think people see ziplining more on mainstream TV now and they see the obstacle courses and, um, the races and things like that on TV, so I think they understand it a little bit better and they want to do something like that. Um, even something like [inaudible] or Tough Mud or something like that. They want that adrenaline of being up high and going through obstacles and the physical. A lot of people do want a physical challenge, you know, and that's why most aerial parks start really easy and then get really hard, because there are a lot of people that want that physical challenge as well.

M: Right, OK, yeah. So, um, I guess, bearing that in mind, um, um, what do you think are the key challenges you face in risk management?

B: Um, part of risk management is the education. People think it's really dangerous, but it's really not. It's a high perceived risk, but it shouldn't be an actual risk. Probably, the fields biggest issue, um, are operators that are uneducated. Um, and consumers that are uneducated. There's a lot of people out there building stuff and operating stuff that should not be building or operating. Um, they don't meet industry standards, they don't meet best practices, um, they don't know what best practices are, um, I talk to people, probably every week, um, at least every other week, um, they want to build big ziplines in their backyards

or little festivals and they just don't have a clue and they don't, they're not willing to pay to get it done right and trained correctly and, um, they're just looking for a cheap, quick buck and, um, that's what's going to hurt the industry really bad.

M: Yeah. Um, so, if they don't meet industry standards, how are they able to open up, or how are they able to get insurance, I guess?

B: Um, because insurance companies, a lot of insurance companies [inaudible] if you give them enough money.

[Laughter]

M: OK. Yeah.

B: You know, insurance don't know, a lot of insurance companies don't know very much about the industry and, um, and they'll just write the insurance, because, you know, it's a pretty good risk-reward ratio for insurance companies. Um, but, you know, if something goes bad, somebody can either get really hurt or die and, you know, it's bad for everybody involved. But, yeah, insurance companies will insure just about anybody if you ask the right company.

M: Yeah. I thought that, um, Hibbs and Hallmark and Granite State were, kind of, the only one offering insurance, but, um, so there's lots of smaller players as well?

B: Yeah, there'll be other people. Like, I don't, for my aerial park I don't write through those guys.

M: Oh, right, OK. That's interesting.

B: So, those are the, those are the big players in the industry. Like, Hibbs has been in it forever. Um, but there's a bunch of other insurance companies that have opened up [inaudible] policy and some of them, you know, some of them are ski hills and other big attractions where, you know, the policies are so big they'll carry a \$5-20 million policy and having an aerial park is, like, nothing in the whole thing, you know, so the insurance company doesn't care. Um, you know, there's race-tracks for zip=tours, you know, having amateurs race cars at 100mph on a track is more dangerous than an aerial park or zip-tours, so the insurance company doesn't care. They'll just insure it without doing any research on it.

M: Right. Flippin' heck. That's insane. Um.

B: Yeah.

[Laughter]

B: And people, the other thing people don't do is, is right now there's, um, and I don't know if this is why you're doing your research, but, um, there's a lot of people in the industry that wants everybody to share the, um, all the accidents and incidents information, like the Mountaineering Community and Outward Bound does and other organisations do and right now our industry does not share information about incidents and accidents.

M: Right. Yeah, that's, um, that's, um, part of the foundation of my study, actually. You hit the nail on the head there!

[Laughter]

B: Yeah.

M: Um, alright. Oh, OK. I mean, so this is my 20th interview, [intentionally left blank], and that's what, that's what I've heard throughout all the conversations, um, is, you know, we need more data, we need to, um, really share data and so on, which is quite, I guess, interesting and alarming at the same time, that, um, there isn't that much data.

B: Right. Nobody, nobody that have had accidents wants to share, whereas those that haven't had them wants to share constantly.

[Laughter]

M: Right, yeah. So, um, um, in terms of, um, I guess, the challenges that the industry faces in risk management, how do you think that innovation has affected that over time? Yeah, how do you think that's affected risk management?

B: The not sharing information?

M: No, sorry, innovation.

B: Innovation?

M: Yeah, in-no-va-tion, sorry.

B: Um, it has changed, this world has changed so much in the past 10 years, it's ridiculous. I don't think anybody, 10 years ago, could have imagined what it is today. Um, and I think it's getting, some people are trying to go bigger, faster and longer, um, without understanding what they're doing. Um, and sometimes the products aren't keeping up. Um, so the brake-

system that people use, the trolleys that people use aren't keeping up with how people want to build stuff. Um, which, which, um, sometimes has caused accidents.

M: Right, so, the, the way the industry is changing, the, the equipment is not, sometimes, not able to keep up with the demand or? For change, or?

B: Correct, yeah.

M: Right, OK. Um, yeah, so, um, do you want to elaborate on that?

[Laughter]

B: Yeah, it causes people to use products in a way that they weren't intended to be used and hope that they work. You know, like the first, the first ZipStop. Are you familiar with HeadRush's ZipStop?

M: Yeah. Yeah.

B: So, like, the first group of people that tried to use that, um, or I should say that, there were people that, the TruBlu auto-belay came out before the ZipStop did and there was people that wanted to, and tried to, use the TruBlu auto-belay as a braking mechanism on a zipline, um, so, but it wasn't intended for that use, so they used it and they tested it and they had it in operation and then they broke it during operation and then they communicated with HeadRush and said, "hey, this could work" and then HeadRush re-designed it and came out with the ZipStop.

M: OK.

B: Um, but, people used the auto-belay in a braking situation on a zipline and it definitely was not designed to do that...

M: Did anyone get hurt?

B: ... and that's just one case. Um, I don't remember if there was any serious incident on that, but I know the guy who blew it apart.

M: Oh, right, yeah. That's crazy. Oh my God.

B: So, yeah, there's stuff like that going on and, like, HeadRush just came out in January and said that the, um, their, the back-up brake, you know, the back-up brake, needs to be different than it was in December of last year. So, now there's a lot of ZipStops out there without a proper back-up brake, according to the manufacturer.

M: Oh, wow.

B: So, a lot of people are operating without a back-up brake that meets the manufacturer's requirements.

M: So, have they got a replacement? Is it just a case of you sending it in or?

B: No. No, HeadRush have said that they're not going to make one. They don't have a backup brake. They just want you to use, they just give you these specifications that it needs to meet.

M: OK. Wow, that's, that's crazy! I can't fathom that, actually, [intentionally left blank], that they would put out a note like that.

B: Yeah.

M: But, I guess it's for liability issues?

B: Yeah.

M: Oh, wow. OK. So, is that something you're seeing a lot in the industry, then, [intentionally left blank]? That, basically, innovation is struggling to keep up with demand as such?

B: Yeah. Yeah, I think, you know, it's probably enough for it to concern me.

M: Wow, OK. OK. And, um, what, I guess, what role do you think that the human factor plays, um, in risk management, the challenges that you face in risk management? Like, you said about education and so on, for example.

B: Well, as an operator or as, looking at the field, and that's including ziptours, aerial parks and ropes courses, most of the incidents, accidents are human-related, um, so it's guides that screw up and don't hook people in or don't hook people in correctly, um, and those are where the accidents are coming from. Usually, it's not a system that was built correctly, maintained correctly and it's just the system that failed. Usually, it's the human in the system that failed.

M: Right, OK.

B: Um, it's also, there is some commercial aerial parks operators that are using zip harnesses and lanyards that are not smart lanyards, um, so a participant is taught how to

keep themselves appropriately attached to the aerial park and, um, humans don't always do that. They screw up.

[Laughter]

B: So, there's been a couple of accidents where they're not in a smart system and the human screws up and an accident happens as a result of it.

M: Are you referring to the smart belay, [intentionally left blank], sorry?

B: Yes, yeah. The smart belay. The people that don't use smart belays, you know, in aerial park operations, you know, that's really surprising to me.

M: OK. Yeah. So, well, I assume, then, that you use smart belays at your parks, then?

B: Yes, yeah. We're even building ropes courses at summer camps and stuff with smart belays on them. Even in the educational setting we're pushing smart belays, because it's not good to have a person that's got limited amount of training 30ft in the air and they can unclip themselves and fall off the apparatus.

M: Yeah. Yeah. I mean, it seems, I mean, I've been on these courses as well, and you know, you do the ground school and all that stuff, but once you get up, you know, 20-40ft up in the air it, kind of, goes out the window, almost, doesn't it?

[Laughter]

B: Right. So, yeah, we build very few static courses. I think we built 4 static courses in the past 7 years.

M: Oh, wow.

B: Um, for educational use, just because we don't like them and people can unclip and fall off.

M: Um, just out of...

B: Um, but all the aerial parks... oh, go ahead.

M: I was just going to say, just out of curiosity, it's not really to do with my study, but, what kind of smart belay do you use?

B: Um, we use an ISC SmartSnap.

M: Oh, OK. Yeah. Yeah, that's cool. Yeah, I've heard a lot of people use that and the Bornak as well, I've heard around and so on.

B: Yeah. Yeah, there's a couple of good ones on the market now, so at least people have a couple to choose from.

M: Yeah, that's true. Um, so, I guess, just bearing in mind what we've just talked about, [intentionally left blank], bearing that in mind, what does effective risk management look like to you?

B: Um, keeping up with industry standards is really important. Having professionals review your, qualified professionals, review your operations and your installation. Um, an easy way to do that is by using an ACCT Professional Vendor Member, or PVM. Um, ACCT is also working on an accreditation programme for aerial parks and ziptours and challenge courses, um, which I think is really going to help the industry, because as a consumer you don't have a clue if an aerial park is built correctly or operated correctly. You just assume, since they're open to the public that they meet all the standards that they're supposed to meet and, um, in some jurisdictions there are no standards, um, and you don't...

M: Right, you mean that in some states...

B: Yeah, some states and some countries there are still no standards. Like, I just got a call from a tour company in Sweden and they take people on ziptours all over the world and they don't know how to tell if a ziptour is up to standard or not. Um, and they called us to go inspect and review programs in different countries, because they can't tell if the ziptours that they're taking people on meet standards. So, it would help once this accreditation program gets pushed through ACCT, then those ziptours could become an accredited program from ACCT so the consumer would know that, at least, it meets ACCT standards, has been reviewed and things like that.

M: OK. So...

B: It's important to have a program like that in place.

M: Yeah, so the accreditation, it's like, it's like the PVM almost, but for operators instead?

B: Yeah.

M: Oh, that's cool, that's cool. When's that coming out? Do you know?

B: Um, it's supposed to come out next year.

M: OK. Yeah, that'd be really good.

B: Um, I think they're going to pilot some this year, um, but, you never know how long those programs take, but, yeah, hopefully 2018 there'll be a rollout of that program.

M: Yeah, that'd be really good, I think. I think that'd be really good for the industry.

B: Yeah, so do I.

M: Yeah. Um, and, and you talked a little bit about education of your staff and your participants as well, [intentionally left blank], um, so how do you go about that?

B: Um, education of staff takes years. Um, you know, it's almost like an apprentice program that our staff go through, as far as construction and design and training. Um, as far as training operational staff, um, to actually run aerial parks and stuff, um, it's nice if they're actually trained by a 3rd party professional and then that 3rd party professional trains them to the ACCT standards. We, as a company, as a, as our construction training company, we certify people to the ACCT standard, um, so it would be nice to see more operations hire a 3rd party professional and get their staff certified to ACCT standards, um, or at least, you know, professionally trained, professionally reviewed. Um, there's a couple of courses that do in-house training, which can be very good and cost-effective and then we still like to do a, um, a test and review day. So, we'd go in and we'd test all their staff that were trained, that were trained in-house and, um, it's just a 3rd party verification that staff have certain skills and knowledge and I think that if you did that more as an industry it would help significantly.

M: Yeah. So, is that, is that something you do just for the parks you've built, or is that something you'd do for anyone, basically?

B: Um, we would do that for anybody that calls us, that operates a course that currently meets ACCT standards.

M: Oh, right. OK. And, and, um, yeah, so, is that, so that's not quite happening a lot in the industry? Is that what you're saying? You'd like to see more of it?

B: No, there's a, yeah, there's a lot of small operators, like one of my guys just got a call from a previous client and he wanted to hire my guy direct, um, and when my, when my employee wouldn't go and train for him, he just tells him, "oh, well, we're just going to inspect and train in-house this year again" and they still have insurance. You know, it's a

small aerial park ziptour and no professional has looked at their staff or their course in three years now.

M: Oh my God. Oh, that's crazy.

B: And they're still operating and they still have insurance.

[Laughter]

M: Yeah. OK. Um.

B: You know, so, there's a lot of that. Once people operate, even for a year or two, even if they get professional training at first then they move away from professional training, at least because of cost, um, that's a big reason for why they move away from professional training, and then they think they can train their own staff. And some of them can and some of them can't. You know, but I think training is the biggest way that the industry could become safer as a whole. Um, you know, more training is always better and third party professional training or third party professional verification is really important, I think.

M: Yeah, just to get that outside view or somebody coming from the outside and, um, yeah.

B: Right.

M: OK. Um, so I guess, um, internally at your companies, um, what kind of procedures do you have in place in terms of identifying, assessing and responding to, to risks or new risks?

B: Um, yeah, we've got our operations manual, which lays out a bunch of safety stuff and protocols and all the staff have to read that and be really familiar with that. Um, they're reviewed by staff on-site all the time. Um, I show up on site and do some safety reviews, um, you know, randomly throughout the year with, with, um, all the staff. We have safety meetings about it. Um, if we have any close calls we do a review, what happened and why there was a close call so we can prevent anything like that from happening in the future, ideally. Um, we do practical tests, we do written tests, you know, things like that.

M: Right, OK. Um, oh, so you do tests, um, written tests as well for your employees?

B: Oh, yeah, and this year we even, um, this year we even implemented a, um, for all of our clients and we're going to use it for our staff at our operation. It's like a four-page lists of statements, um, about safety and operations and standards that are all true statements that they have to read and initial behind every true statement and sign the bottom of every

page saying they understand these items, um, just as a reinforcement and as a liability issue.

M: Yeah, for sure. That's brilliant. I, I think that's the first, um, the first I've heard of something like that, [intentionally left blank]. I mean, people I have spoken to, I mean they obviously do a lot of training and so on, but, um, written, um, material as well, in that sense, like tests and so on, that's brilliant, yeah.

B: Well, if, um, if anything goes to court, if you don't have written tests that are signed and dated by the person that made the mistake, you don't have anything. You can't prove that they were trained unless you have written tests or written proof that the person was trained. So, from a legal aspect, if you're not doing written tests, you don't have anything.

M: OK. Yeah, of course. Yeah.

B: You know, because in court, you're sitting there and you go, "what did you train them to?" and you go, "well, you know, I trained them how to do that rescue" and then they're going to ask you to prove it.

M: Yeah, you've got to show the paper-trail, yeah.

B: And, right, and if you don't have the paper-trail, you don't have anything.

M: Right, OK. So, how...

B: That's just how our courts work here.

[Laughter]

M: No, no, it makes sense. I mean, I think it's probably pretty similar over here as well. Um, but, um, how do you monitor, then, that your risk management procedures are being followed throughout the organisation? Because, obviously, you've got two different organisations, as well.

B: Um, in our construction, installation company, they have morning meetings when they're on a construction site. Um, they're always evaluating each other and I have a site supervisor, um, like, on any big construction site. So, they're constantly evaluating and watching the employees and making sure that they're doing things correctly. Um, in our operation my operations manager there is constantly training staff and reviewing with staff different protocols, um, watching them doing lowers, watching them doing course

inspections daily. Um, and then I go there, um, probably every other week and watching employees work.

M: Wow, OK. Um, right, um, so, I mean, how do you think, then, that, um, risk management relates to the overall culture in, in your organisation?

B: Um, my employees understand that safety is the number one thing that I care about. Um, I want everybody to go home from work that day. I want work everybody to go home in the same state that they showed up in and even if we lose money or if we make clients upset, or, you know, no matter what happens, safety is the number one priority. Um, and there's no compromise on it. If something's not safe to do or appropriate to do, um, it's hammered into my employees' heads that they absolutely cannot do it. Um, that's not to say there'll never be an accident or no employee will ever do something stupid, because, because employees sometimes do things that they shouldn't do.

[Laughter]

B: But, there's no way to control that, unless you watch every employee, every hour that they're working, which is impossible. Um, but, you know, we do everything that we can to establish that culture of safety in our company, companies.

M: Yeah, OK. So, would you say that it's got a pretty big role in your overall strategy, as well, in your organisations?

B: Yeah. Yeah, I would say that we're very conservative, compared to other people, um, to other companies, in both our operation and our installation, um, any of the really big projects where people want to do really goofy stuff, um, we just choose not to work with them, because I'd rather stay in our comfort zone and do what we know is appropriate and safer, um, than do things big and crazy and see what happens with stuff. Um, as a matter of fact, I struggle there with saying the word 'safe-er', because I don't let my employees use the word 'safe', um, in anything, because there's nothing that anybody does is safe. Um, and that's taken years to get that out of people's vocabulary. It can be safe-er, it can be safe-ish, um, but nobody in either company ever tells anybody that they're going to be safe.

M: Right, because it is a risky activity.

B: Well, you can twist an ankle while walking down our trail to get to the aerial park.

[Laughter]

M: Yeah, very true.

B: You know, there's no way to, there's no way to keep you safe and there's people that actually publish in their brochures and in their advertisement that it's a safe activity and if they ever gets hurt for any reason, they're going to lose a lawsuit in the states, you know, because they told their clients that they were going to be safe and guaranteed their safety and, you know, anything can happen. Um, so that's a big thing for us, is the word 'safe' that we just can't ever use it.

M: Yeah, that's interesting actually, yeah, that, basically, you're opening yourself up to liability by using it, essentially.

B: Oh, huge. And that's what everybody wants to hear, you know, makes, they want to all make sure that they're going to be safe, but, we could never, nobody could ever guarantee safety. You can't do it. You know, you can control all of the safety things that you can control, but you can never guarantee safety. You could have a heart attack on the line. There's been incidents where trees have broken off and fallen on the exact moment somebody is zipping by it and they collide with a treetop that's snapped off. Um, there's all kinds of crazy stuff that happens. You know, we could never guarantee somebody's safety.

M: Yeah, I mean, I was, I was speaking to somebody who said that, um, you know, a customer was going down the zipline and I think, I think they got hit by a bird.

[Laughter]

M: Which is, which is just freaky.

B: Right, yeah. Right.

M: I mean, yeah, that's completely out of your control, of course, um, a bird or a tree falling like that. You know, that's crazy, yeah. So, um, and you've, I mean, one of the things that you have mentioned quite a lot, [intentionally left blank], um, is that you have meetings and so on, so, um, in terms of the communication, I guess, between the management and your front-line staff, um, what communication, or what lines of communication exist between your management and front-line staff?

B: Um, my operations manager is on site, pretty much every hour that our operation is open. Um, they might take a day every other week off, or something like that, but during, you know, peak operation times they're on site every hour that we're open. Um, so every staff member can communicate with him, check in with him every day, multiple times. Um,

we always have a line of communication open via cell phone or email with anybody. You know, any one of my staff can contact me any time, you know, day or night, weekends, holidays. Um, you know, I make myself as available as possible. Um, you know, so there's no, there's no barrier to working your way up the chain to the management or the owner in either company.

M: OK. Um, and, um, obviously, your front-line staff, they experience a lot, um, first-hand, you know, they're out on the courses and so on, um, and how do you empower or encourage them to share this information or knowledge that they undoubtedly sit on?

B: Um, with clients?

M: Um, no, um, with, with you guys, I guess, essentially. I mean, it sounds like you're alluding to an open-door policy, basically, that exists within the company.

B: Yeah, definitely, it's an open-door policy. And we, you know, I check in with my staff. Um, with my, with the building, installation staff I check in with them, I don't know, um, average of every other day, I check in with all my staff, um, usually it's on the phone, because we're all over the country. Um, and with my operations staff I check in with them as often as I can. The front-line employee, most of that interaction is really those employees with their direct manager, my operations manager. Um, so I have less interaction with my front-line employees at the operation, just because I'm not there every day. Um, but I still try to check in with them, um, at least every other week, personally.

M: So, um, what role do you think, then, that, um, leadership plays in effective risk management?

B: I think leadership is huge. You have to lead by example, you have to care about your employees, you have to care about their wellbeing and then you need to instil in them the care of our clients, the clients wellbeing and the clients safety, you know, emotional and physical safety on everything that they do. So, I think it all kind of comes down from leadership and that's what develops the culture in the company and then once that's culture is developed, key employees just keep that culture going. But, once it's established it can, kind of, feed itself with some reinforcements. So, leadership, leadership is pretty important in, in risk management and safety.

M: Right, OK. OK. Um, and, um, just before, we talked a little bit about insurance and so on, um, some of the insurance companies out there. How do you think, or can you explain how

the state and other stakeholders, such as insurance, how do they influence your risk management procedures? Or do they?

B: Um, in some states and jurisdictions they do. Um, some states will say that you need to follow ASTM standards, some standards will say that you need to follow ACCT standards. Um, some states don't care. Um, some states only care about ziplines. So, you can have a big aerial park of 50 elements or a hundred elements, but if you have one zipline, that's the only thing that you really need the state to inspect or turn inspections into the state for is that zipline, um, which is really weird. You know, I got called to go and inspect a big aerial park and they just wanted me to inspect the five ziplines that were on it and I'm like, "really? Only those five ziplines?" and they're like "yeah, that's all the state really cares about, so that's all we want you to inspect".

[Laughter]

B: Um, you know, so it's weird. And then, as, um, for ACCT we try to help any state or jurisdiction who wants to develop standards. Um, we actively try to help them. Actually, we try to get them to adopt ACCT standards, but we do everything we can to, um, help them understand the current standards out there and what's important to pay attention to, um, because they don't know. I mean, most states don't know what an aerial park is. Um, you know, so they don't know what the regulations are and now the ACCT standard is an ANSI standard, so it's easier for states to understand that it's an ANSI standard and that that's a good thing, that they can follow and put some trust in it.

M: I mean, do you, do you think that it's an issue that, um, some, that there is, um, that there is a lack of industry experience on, on the public agency side?

B: Yeah, I think it's a big deal. I mean, we just did a zipline in Iowa this year and the state called and said, "we're going to inspect your zipline, um, and regulate those ziplines" and I said, "well, that's wonderful, um, but you can't, you know, because it's not in your state laws that, that you can inspect and regulate ziplines". I said, "So, I'll be happy to talk you through anything, provide anything, but as far as regulation goes, there's nothing to regulate it to". Um, so there's a lot of, and that's happening in [intentionally left blank] too, is our building inspectors, they go, "well, we're going to inspect that" and it's like, "OK, what are you going to inspect it to? And you don't have the knowledge to inspect it?".

M: Right. What did they say?

B: Well, they get really mad and then as you work up the chain, then their management understands that they can't regulate anything, because they don't know anything about it. It would be like hiring me to inspect a rollercoaster.

[Laughter]

B: You know, I, I don't know how to inspect a rollercoaster. I can make sure there's no broken bolts or, you know, whatever, but I don't know how the whole system works.

M: Oh, wow. That's, that's, um, that's crazy. So, I mean, I, do you find that a lot of the states are regulating it? Or is it, it seems like, to me, that it's only, like, it's only, I don't know, maybe a dozen at the moment.

B: Um, I bet we're up to about 20. I don't know for sure, but, um, they range from, like California has to have their state inspector, um, inspect every course, um, to states that don't care, you know, or states that just tell you to turn in an inspection report from a qualified person. Um, you know, so it varies a lot. And then, certain states get a lot more attention than others. Like, Tennessee and North Carolina just went through pretty, um, public regulation, um, and, like, Michigan tried to regulate. There were two offices in Michigan that tried to regulate ziplines and they worked out of the same hall in the same building and they didn't know that the other office was trying to regulate ziplines in that state.

M: No way!

[Laughter]

B: Um, so they both came out with zipline regulations, but they were different from each other. So, they both had to get on the same page. So, it's kind of all over the place.

M: Oh my God. That's got to be worrying for anyone who operates in Michigan. "Well, which one do we follow?"

[Laughter]

B: Right. Right. Yeah, so, it took a little while to figure it out, but they did get it figured out.

M: Oh, right. OK. So, did they combine them in the end?

B: Um, the truth is I don't remember how one shook off. I just think they finally got on the same page.

M: Yeah. And, um, speaking of combining standards, I guess, you've, you know, you said there's the ASTM and I know there's the PRCA as well. Is it worth combining all the standards, so you have one to just go by?

B: Um, well, when it goes through, when a standard goes through an ANSI process it takes all the stakeholders in the industry to put their voice in, um, to come up with those standards and in order for it to go, you know, become an ANSI standard. So, really, those ANSI standards were, um, you know, they went through due process and they had input from stakeholders of every kind. Um, you know, so I think that's a great process. Um, the ASTM process is the same way. Anybody can show up at an ASTM meeting. It doesn't matter who you are and you have an equal voice as everybody else in the room. Um, you know, so they're pretty good open standards writing, um, organisations.

M: Are they, are they quite different, [intentionally left blank], the two? Um, ASTM and ACCT? Um, in terms of the standards?

B: Um, no, they're similar standards. They align up pretty well. ASTM requires a couple more things, um, but it doesn't necessarily, they don't necessarily make the courses safer. It's just different boxes to check.

M: OK. Right. OK.

B: You know, so some of it it's just. One nice thing about ASTM is states understand ASTM and they have a reputation of creating quality standards. So, a state can easily hang their hat on an ASTM standard, without knowing anything about anything, um, just because that's what they're used to seeing, um, and they can check the box saying that this meets ASTM, current ASTM standards and they can check the box and that's all they really want to do. Most states don't really care to know the standard or anything like that. They just want a box to check to say that that operations meets the current standard and they understand ASTM well. Um, more and more states are understanding the ACCT standards, because we're helping them to do that, um, it's just a longer conversation.

M: So, are you finding, then, that more states are trying to engage more with the industry, then, rather than just checking boxes, as such?

B: Yeah, I think they are and, you know, especially, if they're not in crisis mode. Um, like in North Carolina there was a death, um, of a young girl, um, and they were in crisis mode, so they jammed through a bunch of regulation that didn't make sense, because everybody was emotional and they wanted it changed overnight. Um, it's easier if you can, like in

[intentionally left blank], the state does not want to regulate aerial parks or ziplines until there's a death.

M: Oh.

B: And no matter what I do they will not sit down and learn or meet me at any aerial parks or anything. Um, they just want to deal with it once there's a death.

M: Is that what they said?

B: That's what they told me on the phone.

M: Oh my God, that's insane!

B: Right. To me that's insane and I tell them that and they don't care. Um, so, unfortunately some states wait until it's emotional and there's been a death and then they'll start to do something about it. Um, but, unfortunately, usually that's too late and then, um, and then bad regulation comes out of it.

M: Oh, man. Yeah, for sure, but also, why wait for it until you have, you know, a fatality? You know, it's just...

B: Yeah, it's crazy.

M: Yeah. So, I mean, I guess, um.

B: And that's why some states are, some states are, um, operators in states are forming associations or alliances. Um, like North Carolina has a really good one now, um, Ohio has had a really good one for a long time, um, where operators in the state all get together and help educate each other and help educate the state, um, because no matter who's operating in your state, if they have, you know, a high profile injury or death on one of their courses, it's going to affect all the other operators in your state. Um, so operators started to get together to help push regulation or steer regulation in certain directions or educate their state on what's going on or what they're doing. Um.

M: Wow, OK. So, basically, what they're doing is you have ACCT on the national level and then they're moving more locally, as such, on a state-by-state basis?

B: Yeah.

M: Wow, that's brilliant.

B: And I would say that Ohio and North Carolina are the two biggest, best examples that I know of, um, in the US.

M: OK. Did, did North Carolina end up regulating or did they, did they push it aside in the end?

B: Um, we don't work in North Carolina, so I can't give you answer with 100%, um, but I think they did regulate.

M: OK. That's alright. OK. Yeah, I just, I mean, I read about the accident they had there as well. Um, I think the ACCT actually went down there and worked with, um, North Carolina, um, with the people, or something like that.

B: Yeah, ACCT spent a lot of time in North Carolina and in Tennessee. Um, you know, helping with those states, um, because unfortunately, both of them had, um, unfortunate deaths.

M: Mm. OK. OK. So, um, [intentionally left blank], how do you think that an incident at one park, how might that affect the rest of the industry, do you think?

B: Well, in certain states it'll shut everybody else down. Um, if there's a death on a, like in [intentionally left blank], if somebody has a death on an aerial park, the state can shut everybody down the next day. Um, you know, whether that course was following standards, um, or not following standards, um, the state can always do whatever they want to do. So, they can shut everybody down. Insurance can go way up. Um, they could always put in regulation that's just, um, a huge barrier to operating in the state. Um, you know, you just never know how it's going to affect other people. That's why a bunch of these states are getting together, all the operators in those states are getting together and getting on the same page so they can help support each other, educate each other, you know, before there's an incident and after.

M: Yeah. I mean, one of the states that I spoke to, um, I was quite impressed with how engaged they were, um, with the industry. They invite all the operators in, um, twice a year, um, where they sit and talk about, you know, "this is how it's changing" and, you know, "this is what we think is going on", which I was really impressed about and then I spoke to another state, where they basically just said, "you know, we don't really have time for the aerial adventure parks, because, you know, we've only got x amount in the state, so...".

B: Right. Right.

M: Yeah.

B: Yeah, like when the state regulators in [intentionally left blank] thought there was about 10 ziplines in the state of [intentionally left blank], yeah, there's about 600 or more!

[Laughter]

M: Oh, wow!

B: So, um, they were off by a little bit. Um, but they don't have the manpower or the skill or the knowledge to do anything about it, so they're ignoring it for now.

M: Yeah. Oh, that's a shame, that is. That's a great shame.

B: Yeah.

M Um, now, [intentionally left blank], do you collaborate with other organisations within the industry?

B: Um, at the industry we do. Um, we have ACCT has some partnerships and some memorandums of understanding with other associations. Um, and I can't name them all off the top of my head, but I think it's ACA, the climbing wall association, um, ASTM, um, so those are the big ones that come to mind off the top of my head. Um, there's a chance you can find that information on the ACCT's website.

M: Yeah. No, that's cool, [intentionally left blank]. Actually, I was more referring to, I guess, whether [intentionally left blank] and your, um, the operating...

B: Oh, on the operating...

M: Yeah, whether you talk to builders and other operators and so on?

B: Um, yeah, I talk to other builders and operators all the time. Um, you know, I talk to a lot of the operators in [intentionally left blank], we just haven't formed a, you know, we haven't formed an alliance or association within [intentionally left blank] yet. Um, you know, and I touch base with builders across the country on a regular basis. Um, you know, it's mostly ACCT PVMs that I'm communicating with, but if, if I have a technical question or, you know, need an answer or somebody else does, we all call each other pretty, pretty frequently. Um, there's also a PVM list-serve that the association manages. Like, today, there's been about 10 emails going back and forth about technical questions from a vendor

and other vendors are answering the questions and trying [inaudible] and, and things like that. So, it's a pretty common occurrence. Um, vendors are talking to each other. Builders are talking to each other about inspections, about training, about design or about installation or about safety stuff. It's a pretty small world and we're all pretty tight.

M: Oh, wow. So, you'll, um, um, share information on things like risk management, and, um, and, um, incidents and so on?

B: Yes, but not in a really formal way.

M: OK?

B: So, the information is being shared with, you know, I've probably got about 7 companies, 7 owners that I talk to on a fairly regular basis. Now, one of those guys might talk to a different 7 companies, you know, on a regular basis. So, not everybody is sharing information with everybody, but everybody is sharing information.

M: OK. I see. So, it's like, almost.

B: We all have our circles of friends and, you know, companies that we run with and that we communicate with and some circles overlap and some don't.

M: OK. So, it's almost like there's some infrastructure missing, um, almost, um? For the industry overall.

B: Yeah, as far as sharing information on risk management and stuff like that, yeah, there's definitely some infrastructure missing. There's, um, it's not in our culture to share that information, it's in our culture to hide that information.

[Laughter]

M: Yeah. Do you think it would be beneficial to create something like an industry body that just has the sole focus of improving risk management procedures for the industry as, um, overall?

B: Yeah, I think that would help a lot. I think it would help in our standard operating practices. I think it would help, um, look at our standards. I think it would help look at our standards, see if our standards are deficient in any way. Um, if incidents are happening on other similar aerial parks, we can learn from it and we can, hopefully, prevent those same incidents from happening on our aerial park or any aerial park that we've worked with.

M: Right, OK. So, is that, is that, kind of, where you see the main benefit of collaboration, as well, um, learning from each other and so on?

B: Yeah. Yeah. Yeah, I think so. And I know that there are some people at the ACCT looking at, um, at risk management and sharing this, the incidents and accidents, um, so Scott Andrews, from Northwest Consulting. Um, if you haven't talked to him yet, talk to him.

[Laughter]

M: Was it Northwest Consulting, did you say?

B: Yeah. Yeah, he's out of Washington State and you can look at the ACCT PVM list and you can find him. You know, I would talk to him about risk management. I would talk to, um, Bob Ryan at Project Adventure.

M: Bob Ryan. Thank you very much!

B: Um, there's not, um, yeah, there's not going to be many people that know more about risk management in our field than Bob Ryan.

M: Oh, wow. OK.

B: Um, and he's also, both of them have also worked with associations that do track every incident and accident. Um, they've worked for Outward Bound, um, they've worked with, um, they've worked with the American Mountain Guide Association or North American Mountaineering, um, you know, so those are, are two people you should definitely connect with about this project.

M: OK. Yeah, because one of the things that I've come across is that, um, I know in the amusement ride industry they have a magazine, I think it is, called SaferParks, where, basically, they'll send out, you know, if anything happens, they'll send out information on what they've learned, what's been learned from the incident and so on, um, but it's all anonymous, um, which I know is, perhaps, a little bit difficult in a small industry, like the aerial adventure industry, to keep it all anonymous. Um, but just that, um, forum, almost, you know, a magazine that goes out to everyone. You know, "this is what we learned from this incident" you know, "do you have this piece of equipment?" or whatever, um, would seem like an ideal tool for the aerial adventure industry as well.

B: Yeah, I think it would be very helpful as well. There's a lot of people that think it would be very helpful. Um, there's also a lot of people who'd be scared about it and, um, Robert Monaghan from Hibbs Hallmark would also be somebody to ask about it, you know, um,

because it would affect them significantly and they're the ones that have all this information, they just can't share it. You know, all the insurance companies know all the accidents and all the information around it. They just can't, um, they just can't share it.

M: OK. Thank you very much, [intentionally left blank], I really appreciate that. Yeah, thank you! So, um, OK, but, but do you find any drawbacks to collaborating at all? Are there any, yeah, drawbacks to collaborating with your fellow industry professionals?

B: Um, there's always, people are always scared that it could affect insurance premiums. Um, people are scared that it could affect company reputations and therefore wreck companies, um you know, like if [intentionally left blank] has an incident or a death, um, I don't want to necessarily jump up and down and share it with everybody. Um, you know, it's probably the right thing to do and there have been companies that, um, that have had pretty high profile deaths and some of them are more than happy to share every piece of information that ever happened with that, as long as the lawsuits are settled and they can legally share it. Um, and, um, they're happy to do that, because if it can help somebody else run a safer operation, they want to do that.

M: Right, OK. Yeah, yeah. So, yeah, again, going back to that learning from each other and so on, yeah. Um, I mean, what, what do you think is required for collaboration to work in the industry?

B: Um, I think if there is a way to help keep it, somewhat, anonymous, um, more people would be willing to share. Um, you know, because, again, if you can leave company names out of things and protect reputations and egos, um, you know, that would, it would make people more comfortable and, um, willing to share and, um, you know, so I really think that that's a big part of it, is just, um, protecting egos and protecting companies and not exposing things that would have hurt, um, the company.

M: Yeah, I mean, it sounds to me as though there's, perhaps, some, um, almost some trust issues in the industry, as such. You know, trusting each other, a lack of it, perhaps.

B: Oh, yeah. And every, um, business owners protect themselves to protect their company. So, I mean, if I lost my company, I'm done working, you know. Like, I don't know what else I would do in life. Um, so I'm going to do everything I can to protect my company and my livelihood and what I've, you know, built and continue to build, um, and nobody's going to mess with that.

[Laughter]

B: You know, I'm going to fight tooth and nail to protect that.

M: Yeah, for sure. Of course.

B: Um, which I think is common in any industry, but there's also ways that, what we've learned and what other companies have learned can benefit other people and I think there are almost a way that we, we are obligated to do that. You know, if we try something and it doesn't work, I would rather tell people than have them try it and have it not work and have a, you know, bad result.

M: Yeah, of course.

B: Um, and that happens in small, um, groups, throughout the industry, but it doesn't happen industry-wide.

M: OK. OK. So, how do we, um, I say "how do we"...

[Laughter]

M: Um, how does the industry, um, get people to the table? You know, how can you motivate people to, um, start sharing this information? I know you talked about confidentiality and so on.

B: Yeah, a lot of it's confidentiality. Some of it's, um, some states require it, um, that you report an incident or an accident within 24 hours of it happening. Um, you know, there's a chance that, like ACCT could require all of their PVMs and, or, accredited programs to do that. Um, but as an association we could, we can actually lose members, um, because they don't want to share and, um, you know, we just have to be OK with that if that's the way we decide to go. We just have to be OK with knowing that we could lose a couple of members, because they don't want to, they don't want to share information.

M: Yeah. Yeah, I was going to ask you, yeah, why doesn't the, why doesn't the ACCT require that? Um, because, it would it seem that, um, you know, getting that data would be essential.

B: Yeah. Some people want to share and some people definitely do not want to share it. Um, so it's a slow process. I mean, we're working on it now. That's why you should talk to Scott, um, and...

M: And Bob, yeah.

B: Scott and Bob, because, they, they are, they know way more about that than I do. Scott is, um, on the executive committee, right now, for the board of directors.

M: Right, OK.

B: Um, you know, so he's great resource that you can call.

M: Right, OK. Yeah, that's brilliant. That's really good. Um, now, but in terms of the, I mean, in the industry we have, there's a lot of small-to-medium enterprises that, um, you know, collaboration, especially, with the ACCT conference, um, might be, you know, time-wise and financially, it might be difficult to attend that conference. Um, so, how, I guess, my question is, um, how do you believe that the size of these, the constraints of these smaller organisations have, how do you think that might impact collaboration within the industry, as well?

B: Um, you know, I think the best way for everybody to collaborate is to, somehow, do it electronically. Um, obviously, we can't all get in the same room and share stories and stuff. Um, you know, sometimes we do at the conference, but again, normally it's not, normally, not everybody is invited into the room. Um, so I think we're going to have to do it in some kind of an open-forum, or some kind of electric, electronic field, or, um, publish, um, incidents and accidents, like, um, the, I think it's the North American Mountaineering Club. They do incidents and accidents in North America and they publish that on a regular basis, um, in the mountaineering world. Um, ACCT is exploring regional conferences, right now, to see if they're financially viable and, um, well enough attended to, um, to have an impact on the industry. Um, you know, so we are, we're exploring that right now. Um, I have a call scheduled this week about it.

M: Oh, wow. OK. Brilliant.

B: Um, so that would be and, um, it would be nice to have more regional conferences so more people can attend, um, because, there is a big price barrier to go, going to our big international conference. It's expensive and, um, we're talking about, potentially, having, um, having a conference in Asia, um, so there's a lot of vendors, um, a lot of new vendors all in Asia and, um, a lot of new aerial parks popping up in Asia, um, and obviously, if you're flying staff over to the US from Asia, that's a big expense, um, so, so we might try to have a, a, um, conference in Asia.

M: Yeah. Do, do they already have an association over there, or is ACCT, kind of, trying to be that organisation.

B: Um, ACCT is trying to be that organisation, um, I don't know all the, all the organisations that are over there. Um, Europe has a ropes course association, um, I think Asia might have one that's kind of established, um, but I think they're willing, um, you know, most of Asia wants to jump on-board the ACCT.

M: That is so cool, that is. Yeah, that's really good. I mean, everything tourism-wise, right, it's just growing so massive in Asia, so that's really good for the industry as well. Um.

B: Oh, yeah it would be great for the industry, it would be great for the operators, it would be unbelievable for the consumers.

M: Yeah! I'm just sitting there thinking of the opportunities as well, you know, as an operator, if you wanted to build, expand your brand, you know. That's, um, fantastic. Um, OK. Um, sorry, I just lost track where I was, [intentionally left blank].

[Laughter]

B: That's alright.

M: So, um, again, I guess, again, going back to leadership, um, what role do you think that leadership plays in ensuring that collaboration becomes a success as well?

B: Um, I think it's huge. I think there, you know, could be a committee from ACCT that, that helps drive this and, um, it's going to take the right people to get everybody to buy into it. Um, you know, it's going to take the big leaders in the industry to buy in so everybody else buys in.

M: Yeah, OK. And just, I forgot to ask you this, actually, [intentionally left blank], is, um, in regards to the conferences, do you think something like a virtual conference might be, um, useful as well for the industry?

[Laughter]

B: Yeah, it's funny, we're talking about all that. One of our major goals for the association is to have, um, like a virtual class-room, um, to do webinars, um, to video-tape some of the presentations at our international association and, um, I forgot what the name of it is. Scott would know this off the top of his head too, but it's, we're trying to, we already have a platform to do it on, um, the truth is we need a lot of people to step forward and do some webinars and do some stuff that we can put out there. Um, so if you want to do that as part of your project, you know, just let me know and I can hook you up and, um...

M: That would be fantastic. Yeah.

B:... you could be one of the first people to do a webinar for the ACCT.

M: Oh, wow, yeah, that would be amazing.

B: Um, but the more that, the more that we can reach out to educate people, the more it's going to help them, the more it's going to help the association, the more it's going to help branding, the more it's going to help everybody.

M: Yeah.

B: It's just everything is a slow process. Everything takes time.

[Laughter]

M: Yeah, but anything, when it's so large, it's like any national, you know, big organisation, change is slow, because there's so many things to consider, of course. It makes sense.

B: Right.

M: OK, [intentionally left blank], really, you know, I've only got one more question left, um, and that's, um, what do you think the future of the aerial adventure industry looks like?

B: I think it, it hasn't even started in the US. I think it's going to get a lot bigger for a lot more years.

M: Yeah?

B: I think you're going to see more and more aerial parks all over the US. Um, it's going to turn more into Europe, you know, what Europe's going on. Um, I think you're going to see fewer ziptours and more aerial parks.

M: Oh, you think they're going to overtake it?

B: Yeah, I think there's going to be more and more aerial parks than ziptours.

M: Right, OK. Um, and I guess, as we move forward, do you, do you think that, um, are the states going to become more involved as well?

B: Yeah, I think they're going to have to be. Um, it's getting to be a bigger thing. It's going to be more well known, um, with incidents and accidents they won't be able to sit idle and not regulate anything anymore. Um, so I think you're going to see a lot more involvement, um, especially in the next couple of years with states and jurisdictions that don't currently

pay attention right now. Um, and I don't think regulation is a bad thing. I think a lot of regulation could be good, as long as it's done right.

M: Yeah, that's the thing, isn't it? As long as it's not done on an emotional basis and so on.

B: Right. Right.

M: Um, I guess, in terms of developments, um, and, or changes, do you foresee anything in, in, like, do you see anything coming out like innovation, innovative products and so on, do you think that'll continue as well?

B: Um, I definitely think that'll continue, because with the competition and with the market growing like it is and, um, you know, unless you're constantly evolving and creating new, cool and fun things, um, you know, the industry, the people in this industry won't let the industry become stagnant.

M: OK. That's brilliant.

B: You know, they're always looking for the next cool thing to do. The next cool design, the next cool piece of equipment. So, it will be fun to see what happens in the next couple of years, what kind of products come out.

M: Yeah, that's brilliant. I mean, it's an exciting time to be in the industry, I bet, isn't it?

B: Oh, yeah.

M: Yeah. Um, right, [intentionally left blank], that's all I've got. I'm sorry it took a little bit over an hour, um, but, um, thank you very much.

B Yeah, no problem.

M: This has been really good.

B: And, um, if you need help tracking anybody else down, just let me know.

M: Oh, really? Um, am I allowed to name-drop or do you want me to just, um, get in touch with you.

[Laughter]

B: Um, well you can, if, um, if you need somebody's contact information, just shoot me an email and tell me who you're looking for or, um, what type of person you're looking for, or if you have, like, a burning question that you want the answer to, but can't get it, um, tell

me what it is and I might be able to direct you to the person or a group that might be able to help you with it.

M: That would be great. [Intentionally left blank], I really appreciate that and, um, and, yeah, thank you for those names as well. Um, I'll definitely get in touch with, um, Scott and Bob. That'll, um, yeah, I really appreciate that. Um, so, what I'm going to do now, [intentionally left blank], is I'm going to send a copy of this call to you. Um, do you do Dropbox at all?

B: Yup.

M: Yeah, OK. I mean, the file is probably going to be about 70 or 80mb, so it's a big too large for an email.

[Laughter]

B: Yeah. Yeah, that's fine.

M: So, I'll go ahead.

B: Yeah, you can just go ahead and share it via Dropbox, that'd be great.

M: And, um, once I've transcribed the call, probably by the end of next week, um, I'll send a copy of the transcript to you as well, [intentionally left blank].

B: Sounds great.

M: OK. Thank you very much for all your help, [intentionally left blank]. I very much appreciate it.

Call ended prematurely leaving out the goodbyes.

Participant 20 Conversation

B: Participant M: Me

B: This is [intentionally left blank].

M: Oh, hello, [intentionally left blank], it's Marcus Hansen. How are you doing?

B: Good. How are you, Marcus?

M: I'm good. Is this a good time?

B: Yeah, it is. It is.

M: Oh, fantastic. Um, thank you very much, [intentionally left blank], after all this, yeah, to, um, opt to take part in my study, um, I very much appreciate it.

B: I, I, I still have a few questions on, on your study.

M: Yeah?

B: You're, you're going to tape this call.

M: Yes.

B: Are you, are you going to, how is this going to transpire? How...?

M: Yes, um, so, basically, [intentionally left blank], um, I record the call and, um, then I'll send a copy of the recording to you, once we've finished the call and then I transcribe the call, but, obviously any potential identifiers, like your name or, or who you work for, that, that's all left out. Um, so what I'll write instead is 'intentionally left blank', um, and that's, um, and that's basically it. Um, but, what, what actually gets into the study itself is only snippets anyway, um, of the, of the transcript. Um, so it'll be a couple of sentences here and there, um, and so on. Um.

B: Um, and it's going to be transcribed, I mean, you're not using voice as a, as a means of providing information. You're just going to transcribe what the content of the communication was.

M: Um, yes. So, um, yeah, I'm going to transcribe the entire call myself, um, which is a joyous task, but yeah, basically, I'm transcribing everything myself and then, um, I, I analyse the information in there as compared to, for example, what other people have said as well.

So, you know, 'X' person thinks that risk management is, um, you know, is, um, is a holistic task, for example, whereas this person thinks it's a...

B: OK.

M: Yeah, that's basically it.

B: Yeah, and then that's fine, because all I can do is, I can't give you an official, um, in terms of my duties, I can't give you an official response. But, I can give you my opinion and if it's my opinion, then it can be, then you can use it as such.

M: Yeah, of course. And, and I understand that as well, [intentionally left blank]. Um, obviously, I think that it'll probably be by about end of next week, I should have transcribed the call. I'll send the transcript to you, um, and then, obviously, you'll, I don't think that I'll be submitting this study until about August time. So, let's say about 3 months for you to read through it and if there's anything in there that you think, "oh, I can't have that in there", for whatever reason, um, I can take it out or we can, you know, you can drop out completely, if you want to, [intentionally left blank].

B: Alright. No, sounds great.

M: OK. Oh, good. OK. So, um, just before we start, so I mean, you've seen the interview questions and, um, so basically, we'll just start with some general, basic questions, then some questions on risk management and then some questions on collaboration. Um.

B: Sure.

M: Does that, yeah? Do you have any questions before we start?

B: No, I think we're good.

M: OK. Brilliant. So, um, please tell me about your role at the, um, [intentionally left blank].

B: Um, I'm an engineer. Um, primary duties, prior to, um, I've got to probably figure this out, but my primary duties have always been in ski lifts or aerial lift transportation.

M: Oh.

B: Um, so, this aerial adventure stuff, or summer-use stuff, for us, has just come to be, um, a prevalent, probably in the last seven years. That's when we've gotten involved. So, now, we're, as an engineer, we're doing design review of proposed systems on, on public lands

and, um, so, that's basically my duties. And then we monitor operations and testing the inspection process and all of that.

M: OK. So, um, help me understand this then, [intentionally left blank]. So, when it's on public land, is the state not involved at all then, or is it both the state and the federal government?

B: Both. In most cases it's both. There's some, um, some states don't have a program for this, so then we'd be a single authority having jurisdiction.

M: Oh, alright. OK. So, that's quite interesting, then. So, and, you review the, um, the plans of the, um, the proposed course as well?

B: Yeah, correct.

M: Oh, wow. OK. Um, OK. And so, do you oversee all types of ropes courses? As in, aerial adventure parks, the traditional ropes courses as well and so on?

B: Um, yes. I mean, ziplines, aerial adventure parks, canopy tours, mountain coasters, um, biking trails, on federal land or on public land that, that reside on the [intentionally left blank]. So, if it's not on the [intentionally left blank], I'm not involved.

[Laughter]

M: Alright. OK. And, um, what standards do you follow, I guess? Is it based on the ACCT or?

B: Um, really the only standard that's out there, in the very beginning, say 7 years ago, the only standard we had was the ACCT standard. Now, we, now we follow ASTM 2959 or the F-24, in that sense, because that incorporates some of the other things that we're seeing. Um, it's better, it's better than the ACCT standards. That would be mountain coasters and, um, some of the other, um, potential projects that we will be seeing at some point.

M: Oh, OK. Um, so because they already have standards for similar activities as well. Oh, OK. Are they quite similar?

B: Yeah, and we think that, yeah, some of it. I mean, we think that, I mean, I've provided, um, on the 7th or 8th edition of the ACCT standard I provided, I don't know, 160 comments. They shared it with me and they wanted me to provide comments.

[Laughter]

M: Wow. 160?

B: I provided a lot of comments and, and they, and they in turn, um, told, told me that they weren't valid comments. And that, and that's fine. Um, I'm coming from a different side of the street. I think public safety is very important. I've got quite a bit of experience in writing standards, um, so when they told me these were not, um, not relevant...

[Laughter]

M: Well.

B: That left me with a pretty big concern of "where do we go with standards?" and we were already with another gentleman in our group, who's already participating with the F-24, ASTM F-24 group trying to develop a, a zipline standard, or an aerial adventure course standard. Um, and for us, um, how we view is we have a very, um, pretty comprehensive standard for ski lifts, um, so, where we're dealing with aerial adventure courses is you'd ride a ski lift to the top of the mountain and then participate in an aerial adventure course and, from our point of view, we couldn't have a standard for ski lifts where the perceived level of safety was much greater than the perceived level of safety for ziplines or an aerial adventure course. So, that pretty much put the ACCT standard at a point where we could not use it, because it was so, um, it's written pretty poorly, in my opinion, and, um, it left a big hole and it was definitely, um, we couldn't in our, morally, say, "OK, a person riding a ski lift is held at some kind of level of safety substantially higher than the ACCT standard would provide for that zipline".

M: Of course. Yeah. That's really interesting.

B: So, that's why we've adopted. In all our manual directions we've, um, written in the use of ASTM 2959 or equivalent standard. Um, some people claim that the ACCT standard is equivalent, but I've yet to find an engineer, professional engineer, to, um, write that in writing and give me that document.

[Laughter]

B: They're, they're scared to do that.

M: Yeah. Yeah. Um, I, well, what I've found so far in my research, um, is that they certainly have differences. Um, some, a lot of states will accept both, it seems, um, but that they certainly have, um, some differences, for sure.

B: Yeah, and, and this is all evolving, in my opinion. It's a relatively, it's a relatively new and quickly evolving industry and when that, when that kind of thing happens, there's a lot of

states that, um, don't know, they don't have a lot of experience, one, in writing standards, and then, two, interpreting standards, or having qualified people that can understand what those standards mean. So, at some point, and I'm not saying by any means that I'm an expert, but I think I've got, um, a little bit experience, definitely in, in the ski lift industry and writing standards, um, so that gives us a little bit of an advantage and how it'll all pan out is by industry. Um, by lawsuits, by insurability, um, um, and that will come around. So, the example is if one group of pay-to-play, so to speak, of commercial operations is using, using a standard and they have a major accident and some entity points to some group that's using a different standard that's perceived to be higher than the current standard, or that standard that that accident occurred on will be criticised and then money will be payed out.

M: Yeah, for sure. And I think that's a good point, actually, [intentionally left blank] and I think also, um, just with the, with the reputation that the ASTM obviously has from the amusement ride attraction and so on, you know, they have decades of experience, haven't they?

B: Yeah, I mean, and it's not an easy standard, not an easy group to get things through. You know, you have power-houses like the Disney's and we all understand that we're not running a Disney operation and we're not at that level, but, again, there's got to be some kind of perceived level of safety and whether that's actualised in real life, that's, that's the thing. In terms of professional engineering and getting all this, that's the reason why we're involved. It's we want professional engineers designing this stuff and going through a process where they're taking a look at the ride analysis, the effects on the human body, um, the effects on, um, as much as we can get them. That's an evolutionary process. Definitely in an industry that hasn't had any, um, regulation previously. I mean, they've had some regulation, but it's, now we're, now we're moving into mainstream and that's a difficult task for, for, for the industry to swallow.

M: Is that something you're seeing more of? The regulation and so on. More and more states doing it, or?

B: Oh, sure. I mean and then in some states, and it's coming about by what? It's coming about by accidents.

M: Yeah, for sure.

B: Um, there was an accident in North Carolina. Um, in that state, I've spoken to them, and that state was going, "well, what industry standards are out there?" etcetera, etcetera, etcetera. We met with the state regarding a ski lift and we met with their lawyers and engineers regarding the ski lifts. Then, they found out that we were involved in, in aerial adventure courses and that led to two more days of conversation.

[Laughter]

B: And they wanted to know why we were using ASTM and why we weren't using ACCT and how did we adopt it and how did we go through this whole process? And, and it was relatively interesting, because they hadn't even thought of it yet, right?

M: So, have they made a decision in North Carolina, do you know?

B: I haven't, haven't heard.

M: Oh, OK. OK. Um, well, so in terms of the aerial adventure parks, what do you think is the key attraction to them?

B: Perceived risk in a lot of ways. I mean, it's an exciting thing, it's in nature. Um, a canopy tour, for example, I mean, it's, um, hopefully it's in nature, and in our world it should be in nature and it's getting people out, out and about and doing things actively. Um, some of these things are an internal challenge and there should be some perceived risk and perceived risk is definitely different than risk. That's probably got to be something that's developed in, in many cases, it's completely different per clientele. Our clientele typically at a ski area, um, we're looking at perceived risk that's completely different than perceived risk in an educational setting. We're a completely different risk than, um, somebody on an eco-tour in Bolivia or eco-tour in the Caribbean. It's completely different than the people that we're experiencing at our resorts.

M: How do you mean, sorry?

B: Um, um, at a ski resort, people are paying, typically, quite a bit of money to participate in canopy tours or adventure courses, um, whereas somebody on an eco-tour going through the canopy in, in Costa Rica or something. That person is not the same person at our ski resorts. It could be, but that level of perceived risk is different in [intentionally left blank] at [intentionally left blank], as an example, um, at a big ski resort, than it would be in the jungle in Costa Rica. So, the level of care for the people at these various locations can and would be different and it should be different.

M: Do you think there is more care, say, in [intentionally left blank], than there is in Costa Rica?

B: I believe so, yes.

M: Yeah. OK. I mean, they have a bit of a reputation further down south.

[Laughter]

B: Oh, yeah. Yeah, it's, it's not going to be, at a [intentionally left blank] resort, for example, it's going to be, um, it very well could be different. And here's another example: in the state of California, [intentionally left blank] has a bunch of projects going on. In the state of California, that state authority has mandated, um, multiple braking systems, and some of them, either one redundant or two fail-safes, say, have emergency brakes for example and it would be highly, it wouldn't be very smart for [intentionally left blank] to, um, have one system in California, which has, um, a level of safety at, say, 'X' and all of a sudden come back to [intentionally left blank] in [intentionally left blank] at one of their resorts in [intentionally left blank] and, or, [intentionally left blank] in the Midwest and have the same type of system that doesn't have the same components or the same level of safety. If they, if they vary at all, to say, 'x', from 'x' to 'y' or 'x' to a little bit less, to say they go to 'r', then they're opening themselves up to liability and legal issues that are, are three-fold. Does that make sense?

M: Yeah, definitely, yeah, yeah. They want to have the same kind of system so somebody can't say that one is less safe than the other or whatever.

B: Right. So, now, now with the rest of the country, and we're going through this process and helping [intentionally left blank] get to this level where they want to be at and where we would like them to be at, but we're not mandating it, they're just doing it on their own. So, now, all of a sudden, who's the cream of the crop of the industry?

[Laughter]

B: Whether it's by nature or by, by fault, doesn't matter, there's going to be [intentionally left blank] out there and all their operations are going to be held at some level of, some level of, I don't want to call it safety, but some level of, um, now we're creating an industry standard.

M: Yeah, that's the right word.

B: Right. And an ASTM standard or an ACCT standard they all were never going to have equality in any of these resorts or any different, any different person owning an aerial adventure course, we're never going to have equality in that, we're not saying that, but some of the industry standards are definitely being set and that, that comes out, typically, in a legal battle and a bad accident.

M: Yeah, and you're seeing more of those, aren't you? Um, the bad accidents and legal battles and so on.

B: Oh, sure. And, um, and [intentionally left blank] doesn't want to be the shining light out there either, I know that, but, um, they inherently are, just because of their clientele.

M: Yeah. Are they on [intentionally left blank] land since, um, since you're working with them then?

B: Um, much, many of their properties are on [intentionally left blank] land, yes, but not all of them.

M: Oh, OK. Oh, they do have private land as well?

B: They have, um, a lot of ski resorts around the United States and some of them are on public land and some of them are not on public land.

M: Oh, OK. Um, what's the, what does that mean, sorry, [intentionally left blank]? Nothing to do with my study, but what does that mean, sorry?

B: Well, in, in [intentionally left blank], for example, a good portion of, a good portion of the land in [intentionally left blank], throughout the mountains, is [intentionally left blank] land. It's [intentionally left blank] land. It's owned by [intentionally left blank] which means it's owned by the people, and then the ski area, they don't lease it, but they get a permit to, um, build a ski resort on it and have lifts on it to benefit the public, right? The public will have access to that land and they can use it and in winter they have to pay for that, the right to use that improvement, i.e. a ski lift or i.e. a zipline or an aerial adventure course. So, that's when I get involved. If [intentionally left blank] found a chunk of land in the mountains that was all private and they wanted to build a ski resort on it, um, that would be possible, I'm sure, through something and then I wouldn't be involved with it.

M: I see. OK. Now, so, um, in terms of risk management, what do you think are the key challenges that the industry faces, um, in risk management?

B: And, and this is just my opinion. I, I think right now, um, it's a closed, it's a closed loop. Um, it's not an open. There's a lot of resistance to, to having state authorities or even [intentionally left blank] authorities involved, um, and everybody is hush hush, quiet, quiet and I think that's not necessarily a good thing. Um, and that, it takes time for an industry to evolve into being more, um, open with communications. I mean, it can, it should start out being very private in a sense, but the details of these things should be brought out openly. The details of near-misses, the details of accidents, the details of mishaps, um, of structural failures, of, um, the details of [inaudible] bulletins and, um, things that are not behaving. Components or pieces that are failing and all this need to come out in some, um, world wide open communication web, or meetings. It's got to become very much more open than it is today.

M: Some kind of forum?

B: And without that. Yeah. And without that, um, it makes it more difficult for people to learn and they're all, they kind of sit on their own little island and they hold all that information in. And people do talk internally, but it's got to be shared more, more globally.

M: it's interesting you're saying that...

B: And the ski industry has, I'm sorry?

M: No, I was just going to say that it's interesting you're saying this, because that's exactly what my study is about, so, yeah, please go ahead.

B: The ski industry is not necessarily all that much better, but it is better. There is, um, I participate in an organisation called International Transportation Tramway Authority Board Meeting and that's a group of, I don't know, maybe 18 to 30 different countries on any given year. We all meet and we talk about what the near misses were, um, how to prevent further ones, and standard issues. Um, issues where their standards aren't meeting what, what that potential failure was and all the accidents and incidents and we meet and we discuss all these things and then we also share that down and, um, for example this week, right now I'm sitting in, in, Grand Junction, Colorado, where we had a Rocky Mountain Lift Association, which is all the mechanics and operators, um, for many, many different ski areas and multiple states here, there's roughly 500 people here. Um, and we talked about problems and I taught classes and there's web classes, kind of like the ACCT does on different venues, but all that information is very public, very public. Um, accidents are very public. But, we'd rather in staying public, you know, typically, in America we've got, um, the

media isn't necessarily all that accurate, so this should be the thing, the, this should be the clearing house for all the accuracy we can find. We're providing all the facts we can. Instead of all this, the media hype or, um, the one, maybe, potentially, one-sided the web the media thought. So, this is where we get all those facts and then we share them with everybody, so then everybody knows. And, and we don't have to put names with everybody. It doesn't have to be, "well, ski area 'X' had this problem". It doesn't have to be on names, just, "OK, this incident happened, this is the type of equipment and this is why it happened". Sometimes it's a little embarrassing. We have to just shoulder up and take, um, our lumps with the sugar too.

M: Yeah, sometimes the ego gets in the way a little bit, doesn't it?

B: Certainly. Certainly. And that's, we have to overcome that. There's definitely still in the ski industry as well as the zipline and the aerial adventure industry there's, there's big challenges for that and we understand that and we're hoping to help the industry evolve.

M: Yeah, for sure. Yeah. I mean, throughout my interviews I've, I've certainly spoken to people that are really keen on sharing data, um, which I think you're alluding to, more data sharing and so on, um, and people seem really keen on it, but at the same time, like you said, you know, they don't necessarily want their name on it, so something perhaps a little bit more confidential. I mean, I don't know if you know, but the amusement ride industry, for example, they have something called, I think it's a magazine, but they have something called SaferParks.

B: Yeah.

M: Yeah. So, that's just an example. Somebody told me at an interview "we could do something like this", um, and the guy told me about it and I read up on it and I thought, "Actually, this sounds like a brilliant idea for the industry", um, because it is all anonymous.

B: Yeah.

M: Um, so, yeah. Um.

B: So, typically, and this is kind of maybe more opinionated, but, we, we, we get a lot of people that, you know, if it were up to the people that are, kind of, doing, doing the day-to-day thing I think you'd get a 100% consensus that, "yeah, I'd like to share as much as I can". Um, maybe internally they have legal representation and then they're restricted and, or you get the small guys that aren't doing it as well as the big guys. They don't have teams of

people at 14 different locations, doing the same thing. They're just their own one out, one person out there trying to make a living. They're the ones that are much less likely to, one, participate in this communication, and, two, participate in the industry events because it costs them a lot of money to get there to participate in that and those are the ones the challenge is where the only way we can share that information and data throughout the industry is by having regulators out there, um, that aren't carrying a stick, but are educating and they do inspections and do some of this other stuff. And, or the industry has its own group of people going out to provide assistance to them, but there aren't a lot of operators that make enough money that are willing to send people out there and help other and that's a problem in the ski industry as well. So, insurance companies are trying to spread the rule or the message, um, inspectors from states, um, [intentionally left blank], like myself, um, I think it's extremely valuable tool to, um, to reach the others that are out there, um, particularly in the ski industry and potentially particularly in the aerial adventure industry it's not the 95%, it's the 5% on the, on the outskirts that are going to affect the industry in a negative way.

M: Yeah. Yeah, that's an interesting, well, yeah, because I mean, that's one of my questions, for you, isn't it, [intentionally left blank]? You know, how may an incident at one park im, impact the rest of the industry?

B: It, it could be, and it doesn't have to be bad. It doesn't necessarily have to be. Bad things can happen to anybody, but often times all standards, typically, standards are developed based on, they're reactive to accidents or potential incidents. Typically, all standards are reactive. So, something bad happens, um, we're going to do something about it and the standard prevents that from happening again and unfortunately, that, that's how things evolve. One thing I'd add to that is, I'm losing, I've lost my train of thought.

[Laughter]

M: That's OK.

B: Um, as standards are reactive. Here's an example: Way back when, um, in the 1960s, ski lifts started becoming mainstream and way back in the 19, early 1960s we started developing a ANSI B77.1 standard for ski lifts and, and we allowed human beings to be more active in that operation in those early stages. They could pull on a handle, which, which was braking and as that, as our industry has evolved we've learned that we cannot trust humans, even if they are trained.

[Laughter]

B: So, in the old days we'd have one brake that was automatic and then one brake that could be manually set by the operator. So, in the, quote-unquote last 50 years, our standard has evolved, I don't know how many times, so, now we don't let the operator do anything. We have stop buttons, regular stop buttons and we have safeties to prevent all these other bad things that could happen, because we can't trust and we can't rely upon humans to make the right decision to do what they do. So, the example in the aerial adventure course or the ziplining world, or whatever, is we should have some automatic braking device, other than relying on a guide. That's one example. And that's a pretty big leap for some people in this industry.

M: I think so, yeah. I mean, I think, um, I guess, certainly over the last 10, well, since it started in the US, so the last 10 years or so, you've certainly seen, still you're seeing less and less human involvement, if you like, both from the staff and the participant, haven't you? With the smart belay, for example, that's changed the system a lot, hasn't it?

B: Yeah, and I mean, that helps and I'm only talking about, I'm not in the educational world. I mean, there are some, there are some, um, YMCA parks and Christian things where we're trying to, or those organisations are trying to provide education and talking about trust and those things. That's a little bit different and I'm not, we're doing a little tiny bit about that. That's 1% of what I do. It's mostly what I'm dealing with is the commercial side, where somebody is paying money to do this and in that case that's completely different, um, in terms of that perceived risk vs the real risk. Those are different. Most of this was being applied to the commercial side.

M: Yeah, I mean, my study is purely about the commercial side anyway. Um, but, um, so, how do you think that innovation has affected risk management in the industry?

B: Um, it, it, it greatly affects risk management in the sense that, um, in ways that takes away human, in ways it takes away human involvement. So, risk management for an aerial, for a manager of a park. The team solves, you know, some smart belay system. Here's the example: some smart belay system, he's removed all that portion of risk management for that particular aspect of those guys trying to get people hooked up, but the problem, the problem with that, and this is two points, the problem with that is if I have a guy and I don't empower that guy. I don't give him any duties, I don't give him any ownership in that, um, in that park or that zipline or that aerial adventure course, right, and I don't give him any

kind of responsibilities or any kind of duties, very much duties anyways, then he's not engaged. And I use an analogy when I teach a lot of my classes and one of my classes is about 'how do we create ownership?'. So, have you ever rented a car, Marcus? Have you ever rented a car?

M: Rented a car?

B: Yeah, rented car.

M: Yeah, yeah, sorry, yeah.

B: Yeah. You rent a car and you get in the car and fill it up with gas and you're off running around. So, do you ever checked the oil in the car?

M: No.

B: No, you don't, do you? Nope, you're responding, and that's exactly what 99.9% of the people say. No one would check the oil in a rental car. If it starts smoking and gets hot, you're going to call and get a new one. So, you have no ownership in that car. What we do, as an industry, both in the ski lifts and in the aerial adventure courses is we do not want all our people running these things to have a rental car, where they don't take care of it and they don't care.

M: Yeah, that's a good point.

B: So, we have to somehow instil, have to somehow instil ownership in all the things that they do.

M: Mm. Yeah. That's a brilliant point, actually, [intentionally left blank]. That's, um, but, yeah, so how do you do that?

B: Um, and, and my expertise is in ski lifts, so here's the example. Whether I've got a, a 1950s machine that's just a slow-moving little double-chair going up to the mountain, or I've got a 10 dollar, 10 million dollar gondolin, a new gondolin system that's easier to run. I instil ownership by giving the people that are running these things a lot more duties that I can't expect, um, my average person to do and I'm going to weed them out. I'm going to find people that can take on this ownership and I'm going to find people that cannot do this ownership-thing and I'm only going to have, well, I could still have somebody that doesn't want to take on ownership there, but I'm not going to give him any responsibilities.

M: For sure.

B: And I have to be able, I have to be able to say, "OK, I want you to go around in the motor room and make sure things aren't getting hot, while we're running and I want you to do this and I want you to do this".

M: OK.

B: "And if you find any problems I want you not to fix it yourself, but call the right people and make sure it gets done", instead of, "I want you to stand right here and if you see something bad, hit this button".

M: Yeah, and I, I guess that's what you see in the amusement ride industry, isn't it? Um, where they just hit red or, red or green isn't it?

B: Yeah, red or green and you have a 17 year old boy out there or 16, 18 year old girl and you're not getting any ownership and, I mean, some of that is OK, but if you could teach them a little bit more occasionally, I mean, once a week, teach them a little bit more about that piece of equipment and get them to look at things. Whether or not you're expecting any action to take place or not, you're teaching them, right? You're giving them a little bit more responsibility to say, "OK, at lunch time I want to make sure you take a look at, right before you go to lunch, take a look at the equipment. Make sure it's all working good, but don't touch anything!".

[Laughter]

B: Give them more and more duties. Don't just make them, we don't want just warm bodies at controls. We want warm intelligent people.

M: Yeah, you want them to buy into it. Yeah, definitely.

B: Right, you've got to get, you've got to instil ownership somehow and there's, there's a lot of ways, but this is one way and you're going to find people. Not everyone is going to be able to do this, so you're going to find people that are and then you're bringing in the young people that are going to excel in the industry maybe for a longer period of time. The people that don't buy in, you're going to weed those out quicker, right?

M: Yeah, that's a good point. These people, once they buy into it, you know, they, they could be staying for their entire career, you know, move up and all that stuff.

B: Right. So, the wonderful thing now about, I think the industry that we're talking about is filled with young people with a lot of passion and a lot of energy, tonnes of energy. I haven't seen this in a long time. The problem with the ski lift industry is it's a little bit

different. We are, a lot of are getting really, a lot older. I'm 50-something years old and we're not seeing as many young people coming in, because we haven't done exactly what we're talking about. We haven't started with all these young people and we haven't instilled ownership with all these young people. I mean, at a ski resort, they're all young running the lifts, but we don't have all that many that keep returning back and saying, "Well, I was an operator for the last 3 years. I want to become a mechanic, um, and in between that time I'm going to become, I'm going to get an engineering degree and still come back and work in the industry". We're not, we're not doing that. We're starting it, but we're starting it late.

M: OK. And that's an interesting point, actually. Because, you would have thought that, um, yeah, I guess, you would have thought that once you start giving somebody, certainly once you start giving somebody ownership, that there's a natural route then to, to go to university and get a degree in that field, because you have three experience, or whatever, right?

B: Yeah. I mean, it depends, if you don't instil ownership. And, and they have to like what they're doing. If they, if they don't, it's just like a fish, if they don't take the bait, then you're not going to catch anything.

[Laughter]

B: But, what the idea is, is to give them, give them more and more and when you find somebody that won't take anymore, then that's the end of that road, but there's going to be people that take more and more, and you're going to find out that a lot of people, even though they're lowest on the totem pole, the very lowest part of that organisation, want to be more. We've got to give those people the chance to take on as much as we can give them.

M: OK. Um, so, how do you, how do you monitor that, um, the operators and, I guess, the builders and so on that are building on your land and so on, how do you monitor that they're following the procedures that you've set forth.

B: Well, I mean, what we ask them to do is to create an, um, for example, a company. So, they're going to give us all this documentation, what, how it was built, the structural calculations and all those things and how they intend it to be operated and they're going to provide training to, um, ski area 'A' and all that training. So, then, I'm up there and I'll visit them or someone else will visit them and they're up there and we're looking at, to the best

of our ability, trying to get an overview of how it's functioning and how people are, in terms of their training, how they're performing their jobs. If they know I'm there on an official business trip and who I am, then it's a little bit different, because people get nervous, one, and then the second thing is, um, they tend to not, they try to go back to their training. So, I try not to let them know I'm there or who I am. I'll participate, I'll participate as a guest as much as I can and then after the fact then I'll meet with the management and then go through, go through the process of, "OK, these are the things I'm seeing, um, this happened, this happened". But, if we carry a big stick and, and, and that's not the idea either. Um, how do you promote change? You don't give tickets. Um, the guy that gets caught speeding, you give him a ticket, well, he feels bad that you gave him a ticket and he's going to lose a bit of money, but he's not going to stop speeding, right? If you pulled him over and gave him the choice of, "OK, just slow down a little bit", he's probably going to think, "Well, that was really nice. I probably should slow down". Sometimes, sometimes you have to interact with people, sorry, interact with, um, people with, um, oh, things are really falling apart sometimes and sometimes you have to step in and either close them down until people learn, but that's, that's on the rarer side. That's very rare. In my 18, 20 years of doing this it's only happened 2 or 3 times in my career. And, and I've got a lot of places. I mean, I've got over 600 lifts.

M: 600?! Alright.

[Laughter]

M: And I guess, I guess that's one of my next questions, [intentionally left blank], is, um, what lines of communication exists between, um, you and the, and the industry, as such? I mean, do you have meetings with them or how does it work?

B: I, yes, I mean, we're constantly talking and meeting. Um, for example this week, this [inaudible] conference, I'm out there and the main person I'm here is to be present and have a face for all these people, so even the, the mechanics and, and supervisors and operations supervisors and all those people can come and talk to me. It's a different environment than when I'm there at the ski area or when I'm at an aerial adventure park. It's more open and they can say, "hey, that's [intentionally left blank]. I can go and say hi to him" and then, "hey, he seems like a pretty nice guy. I'm going to go ahead and ask him a question".

M: Because you went to the ACCT conference this year, didn't you?

B: I didn't this year. I haven't been doing it, because I'm a pretty person...

[Laughter]

B: But, I attend all the ASTM stuff.

M: That's the one, sorry.

B: I make sure I'm always available. I'm always available for a comment. When we're in a meeting, I'm a little bit different. I'm, I'm trying to get my ideas, at least, understand and I listen really well also, but I've got an agenda. After the meeting, I'm open for a beer, I'm open for everybody to talk to and ask questions. Um, and it's completely different than, than during the meeting, when I'm trying to get things done, where I've got an agenda during the meeting.

M: Do, do you, are you, are you working on your own, [intentionally left blank] or do you have a team with you, or?

B: Um, I'm, no I'm part of the [intentionally left blank], for the [intentionally left blank] and that's a group now of 4 people. Hopefully, it'll be 5 again in a year. Um, I'm probably the technical in the United States, um, and I've got by far the most work.

[Laughter]

M: Oh, wow. But, there's only four or five of you for, for a whole nation? That's, um, that's tough.

B: Yeah and, and it's, um, but again, most of our work is in the ski lifts. It's not in the aerial adventure course and that's changing a little. I think it's going to be, um, this year, in, in my regions that I'm covering, I probably have 10 projects in the aerial adventure, or the summer-use side. Um, two or three mountain coasters, um, a couple of big, pretty big zipline projects, um, two canopy tours and then two aerial adventure parks.

M: Oh, so you only, is that how many you oversee in total? Or, how many aerial adventure parks do you oversee, do you think?

B: Um, I mean that's what's going to be constructed this year in my region.

M: Oh, I see. OK.

B: But, I mean, I, I've got probably a dozen right now. That's how new it is for us.

M: But, a dozen that's quite a lot, though, still.

B: Yeah, it's a dozen and I'm not seeing them all every year. I mean, I've got areas that, in my risk assessment, I've got areas that are higher risks than others. So, some years, if I'm really, really busy, I don't get to see the groups that are, that are, kind of, functioning on their own. I mean, they're getting inspected by somebody, but it's not me. It's probably a third-party, completely independent of the, of the adventure park and then they go out and they go send me a report and I'll be OK with it. If there's something they don't like in the report, then I'll visit them quickly.

M: Is that something they have to do by, by law? Third-party inspections?

B: Yeah, third-party inspections is every year. Once a year.

M: OK. Yeah, OK. So, um, what role do you think, then, that leadership plays in effective risk management?

B: I think that sets the tone for everybody. Yeah, I truly believe it comes from the top down. So, if risk, if, if the management and the top people in the organisation don't believe in, in risk management and it's just a word that, that they use, then it's going to be the same way all the way down to the lowest level. So, if people are, um, and this gets, kind of, into the same thing of instilling ownership. So, if people have the same, if management is out there with a story and with a commitment to risk management, with a commitment to ownership, um, instilling ownership and sharing and being open, then all of a sudden, the supervisors, mid-level people are going to be in the same boat and if you have good people then they are going to be doing the exact same thing all the way down to the, to the individual guides or the brand new people and they're not going to be the ones that just throw somebody, um, go through a little bit of training and then throw them out there, um, and seeing if they can swim or sink. They're going to hopefully hold their hands and watch them and mentor them and, um, um, get them to a point where, all of a sudden, these people are, one, excited and, two, they're engaged and they actually do have ownership.

M: OK. OK, so, OK. But, how, how do you, I guess, um, from a management point, point-of-view, how do you, how do you learn from your front-line staff? Um, from their knowledge and so on. I guess, especially from you, I mean, how do you learn from the individual operators and so on?

B: Oh, non-stop. All the time. Um, I think just, um, questioning them.

[Laughter]

B: I mean, talking. Just openly. Especially, I mean, sometimes when they don't know who you are and sometimes when they do know who you are, just that ability to be relaxed, even under, maybe under duress after a problem has happened, is, um, is communicating and listening. Um, half of our industry, at least in the ski lifts, a lot of people don't know how to listen and, unfortunately, a lot of us are engineers and a lot of us that are engineers have...

[Laughter]

B: [...] soc, soc, social issues! So to speak. I don't think I do, but, um, we're not the most sociable people. Um, we're not the, and, and that's one problem, but getting out there and, and having listening sessions and having all the industry participate in a lot of these kind of things over time or making it available for those that really want to do something different. Not just technical classes, not just operations and not just risk management, but having the communications and listening sessions, um, and having dynamic speakers, having people that can get up there and empower and excite and, um, then yet get a message across that says that, "OK, well, we need to listen better". Um, so for me, I learn every, every time I get on a, on a, whether I'm on a ski lift or get on a, I learn something new every day.

M: So, would you say that communication is, um, sort of, key to risk management, then?

B: Hundred percent.

M: Yeah? OK. Um, and then you just talked about empowering and so on, so how do you think, or how do you believe you, you can empower or encourage staff, or not staff, sorry, um, but your operators and so on, to share the information that they sit on with you?

B: And this is a critical part, critical part and it comes. Maybe there's two aspects to it. One, there's got to be credibility. Somebody has to be, and that comes with experience. You have to have knowledge and be able to be credible. Then there's the level of trust that's even more overpowering than credibility. If they trust you and you, you've got, you truly have their backs, you're in a partnership, for safety, for risk management, for the public. I mean, everyone's out there for the public to make sure it's a safe operation. Sometimes, it, it gets over, a little overbearing in the sense of trying to make money, so to have a balance there and, and when you're in that balance, my role is truly public safety. I'm not in there to make money. I understand that fact. I shouldn't know that fact. But, yet, my role is in the public safety side. So, as soon as they begin to trust me enough and they know I'm a credible person in terms of knowledge and experience. I don't know everything, but I might

have good ideas, then I've gained a ton and then they'll listen to me and I'll listen to them. But, but, that's the partnership we have to create, no matter if you're an authority or if you're [inaudible]. Um, there's a lot of proprietary information out there, so there's a lot of stealing and those kind of things, so we all just have to, kind of, you know, I don't know, just live with it. I mean, we're going to try to prevent it, we're going to try to do it, but we, we've got to become a more open industry.

M: Yeah. So, I guess, then, how, how do you motivate people to become more open?

B: And that's the evolutionary process based on trust.

M: Yeah. So, it all comes back to trust.

B: Right. It comes back to trust. So, um, in, in, in the, as the industry grows, the guys working in, in little garages and, um, maybe not doing as good of a job in their research, design and engineering, um, they go away over time. So, then new ones pops up, but, but it's not the big ones, but the good ones that withstand all of that and the good ones are the ones that have trusting partners and have trusting relationships with others in the industry and other manufacturers in the industry and are good at it, right, and they have safe operations. Um, it's the smaller ones, it's the 5% that causes the issues. Typically, not always, but typically.

M: I mean, do you think that, maybe, I don't want to misunderstand anything here, but it sounds, do you think that collaboration is almost key to the long-term sustainability of the industry?

B: It's the only way.

[Laughter]

M: Yeah, OK.

B: It's the only way.

M: Yeah, OK. OK.

B: Collaboration, collaboration leads to evolution. It leads to somebody saying, "Well, this is the problem and I, I think I've got an idea. Let's try this". Um, and then all of a sudden, once, and this is, it might be one company trying to resolve the issue, as soon as that company comes out with 'device x' or 'technique b' or whatever that is, then the collaboration within the industry, at industry meetings, if it occurs on the economic level,

well, then, “hey” and the competitive natures of everybody, we’re going to, we’re going to do this, we’re going to do this. But, if we never collaborate about things and we don’t sit there and say, “well, these are good ideas” as an industry, or “this is where we’re going to go” or “it’s costing our insurance company ‘x’ because we’re doing this and at some point it’s going to really cost us a lot, then we ought to start changing”. That collaboration leads to invention. That invention leads to competitiveness and competitiveness always leads to safety. It starts with collaboration.

M: Do you think that, um, are, I mean, are you seeing this happening at any level in the industry at the moment?

B: Yeah, and, and it’s small, but it’s definitely happening, for sure. There’s definitely people out there doing some pretty [inaudible] and, um, creating some pretty inventive ideas on trying to address some of our concerns and, even though we’re getting blamed for the quote-unquote the need to have some of these devices, when it’s really not us, maybe it’s the [intentionally left blank] that’s going to want these, right, so we’re getting the blame for it, which is fine, and I’ll take the heat, but I didn’t mandate anything. I, I think it’s a good idea, so I sit with them and they’re going, “well, how about this? How about this?”.

M: Well, I mean you...

B: I go, “well, that’s great” and so, all of a sudden, now we’ve got people providing some of these other things, so then all of a sudden there’s other people going, “hey, well, we could probably do that better”.

M: What is it, what is it you’re being blamed for at the moment, sorry, [intentionally left blank]?

B: Um, maybe emergency braking systems.

M: Oh, OK.

B: So, second system that’s automatic, for example.

M: Like on ziplines and so on?

B: Yeah, on canopy tours.

M: Alright, OK. Alright, OK. Um, anything on aerial adventure parks?

B: Um, we’re not seeing a lot of that lately. I mean, I’m sure there is. Um, I just haven’t, um, [intentionally left blank] hasn’t done anything. Some of the projects that I have been on

lately haven't had, um, anything. Um, there's a big project going in this summer at [intentionally left blank] and that'll be something new. So, um, I'm sure I'm going to see some kind of innovation there and it's not a supplier I've been working with earlier, so it'll be an interesting experience.

M: Um, and is that another ski resort did you say, or?

B: Yes, another ski resort.

M: Oh, wow, OK. Um, so, I mean, do you see any drawbacks to collaborating at all?

B: Um, yeah. I think there is a chosen, or a small percentile of people that take advantage of their collaboration efforts to better position their group or company, um, take away some of the competitive advantage that somebody has. Um, and, and that goes with any, any, any industry that's out there, whether it's the automobile industry or whatever. Somebody creates a new idea, um, then all of a sudden it doesn't last long and everybody is doing the same thing. It happens in every industry and it's a drawback and it makes people that are doing the RandD and are spending the money on RandD, um, it hurts them.

M: Yeah. No, yeah, of course it does. Um, but, I mean, do you think that, you know, we talked about trust and so on, um, and, and you were saying that a small group, it sounds like it's a small group in the industry that does collaborate, um, but do you think that is there, you know, these requirements for collaborating, do they exist? Is it just a case of people needing to open up their eyes, or? Or ears, I guess, or is it a case of changing things? Or what do you think?

B: Well, here's some of the issues: you've got the main bulk of the industry and the main bulk does not involve with even people like myself. It's, it's through ACCT and then there's the ASTM group and a lot of those are the same people and a lot of them are newer people or different people, right? Those, those groups are not together, so either, one, the ACCT has got to figure out that on their standards committee, that they have to have equal representation from the manufacturer, from the authorities, from the users, from the educators, education wing, um, from whoever have equal and significant ownership of that standard. Or, two, if it's just going to be an industry standard, and it's not going to involve the authorities, then everyone has to understand that and, and maybe when that happens, then maybe it's going to be a more of a, um, I hate to use the industry standard thing, because it's not, an industry standard isn't a public standard. Um, so I, I, I'm not, so we've

got two groups of people, or three groups of people, PRCA is also another group in the States, um, and we're not all on the same page.

M: Would it be better to combine the standards?

B: Yes, oh, most definitely. Most definitely. Um, because, I think all of us have a significant role in that standard and I think the ACCT, and this is one of my comments, when I wrote my comments to them and it's that you need to get a group of people that is with relative equal representation developing standards. It can't just be industry people. For example, we had some of the people listed on the standards board, when represented at another meeting were manufacturers. Then, all of a sudden, when they're on the standards board for the ACCT, they're represented as users.

M: Oh, alright, OK. Yeah.

B: So, we, somebody has to make a decision. Are they manufacturers or are they users? You can't participate as both. I mean, you're solemn and you should be one. You're not a user then.

M: So, I mean, do the ACCT, do they only consider input from, um, the manufacturers or how does that work?

B: Well, they've got industry people that are from the industry and users, but they don't really have, um, public authority having jurisdiction side of things. So, I don't think they get a lot of input and when they did get input, when they did get input they, obviously, didn't like what I said, so that was one thing. And, and I didn't vote. I didn't vote on it. I didn't say it was negative or anything. I just said this was for the betterment of their standard and I tried to give them some help, but they didn't like what I had to say.

[Laughter]

M: That's a shame that is, yeah.

B: That, that just proves that I couldn't use their standard.

M: Yeah, but it's a shame, isn't it, that there isn't any public, um, official participation, because surely you'd want, I mean, like my study, for example, I'm considering every stakeholder pretty much, apart from the customer, um, but that's why I'm talking to people from the state, right, because they represent the, or from the government, because you guys represent the public, as such.

B: Sure. I mean, and, and we're going to have a different opinion, obviously, than a lot of them. For example, the Boy Scouts of America has a lot of educational camps and they use a lot of these aerial adventure kind of stuff and they're represented at the ACCT as an authority. Well, the boy scouts are a user and if, if I made a rule that requires a lot of financial obligations for the boy scouts to upgrade some of their equipment, based on public safety, are they going to vote for that? Well, maybe, maybe not.

M: Maybe not.

B: I, I don't want economic ties to anything. I don't want to have economic ties to anything that the ACCT does or the aerial adventure course does or anything, but I do have ties to the public. I've got an oath to the public and I'm going to try to watch out for their back.

M: Yeah.

B: Does that make sense?

M: Yeah, because if you don't, who else is? Yeah, yeah, if you don't who else is going to do that?

B: Exactly. So, when I make, so when we make decisions we've got to weigh the public, obviously. We've got to measure the economic impact on the industry, we've got to work to [intentionally left blank] or whoever, we have to understand that as well. So, just being an authority, it comes with great responsibility and that responsibility is, one, you need to, to, to create trust, you need to create collaboration, you need to create, um, credibility, you need to truly gain credibility, you can't just own credibility, just gain it through experience, knowledge and all that stuff. Then, you have to be truly a partner and understand all the inputs.

M: Yeah, I mean, it sounds to me, [intentionally left blank], as if you're, you're, you know, you're really keen on working and you do work really closely with your, um, the private stakeholders, um, which is fantastic, um, because, you know, sometimes government can have a reputation or, um, of not wanting to do that, if you like.

B: No, for sure, and, and I think I'm in a different and more unique role than you probably understand. I think providing an education to a lot of people is half of my challenge. So, if I can't, for example, if I see something wrong on a zipline or a ski lift, if I can't educate the person that's running that well enough so that they understand my same concerns about

that problem, then I haven't done my job and if I have to mandate that they fix, then I've lost that partnership.

M: Yeah, OK.

B: So, sometimes if it's not a critical issue I will leave it, let it go until a week or a month later and I'll come back with a new approach and try to convince them again and tell. So, that has greatly helped me, anyways, um, develop, at least the strategy going from area to area where I try to educate somebody as to what I see and why I see it as a problem and if I can't sell that fact, and it is a sell-job, then I'm not doing what I've been told to do.

M: Have you faced much push, push-back, then, from the industry, do you think?

B: On occasion. On occasion. Right, right now, um, in the aerial adventure side of things, or the zipline, canopy tour kind of things, the biggest push-back I'm seeing is, um, on braking and here's the example, and it's not braking how I think standards are written. Standards are written for a single-point failure. So, if a guide, so, if a guide was to go on a zipline and become incapacitated and, or, he passes out, he cannot receive either major injury or death when he gets to the other end.

M: Yeah.

B: And that's the single point failure. So, I have to have something in place on the other end to either slow or stop him safely that's automatic. So, that's a big push-back from the industry right now.

M: What's their argument against it?

B: Well, their argument, many in the industry believe that the guide is well-trained and that he assumes those risks. Well, in the United States those risks are completely different and if we, if we didn't take due care of that person, because he's an employee, then it's out of my hands. I'm no longer the authority having jurisdiction. Then OSHA, the Occupational Safety and Health people would get involved and they would mandate change in the industry. Do you want to change the industry based on my input or do you want to change the industry based on a mandate from OSHA?

B: And that's exactly what happened in California and that's why they've got emergency brakes in California today.

M: But, and how is that working California? I assume it's working alright.

B: Well, parts of it are working alright, but it's, um, still it's a mandate and it's not in, introduced to, it's a requirement for a hard, a hard rule to follow. All ziplines must have an emergency brake system instead of, well, I could have a zipline that has a fail-safe brake system, which, if it failed this way, it still has the capacity to stop. So, what in California they have is they have to have two systems, essentially and I think we could get by with one system if it were designed right.

M: Yeah, so basically, in California they have to have two fail-safes is that what you're saying?

B: Not two fail-safes, but two incident braking systems.

M: Independent from the, um, from the participant?

B: Yeah, independent from the participant, independent from the guide.

M: OK. So, you've got the brake that the participant is using and then you have two separate ones as well, basically.

B: Right and maybe the participant isn't doing anything and the guide, then you still need a guide plus two other things.

M: That's overkill.

B: So, that's, that's the problem. I, I'd want to make sure that everybody can, I don't want to impede creativity or inventions and in California that's essentially what they do, is that they just mandate and that's where we're at. I think there's a better way to [inaudible], so to speak.

M: Yeah, I mean, because one of the things that I've heard in the interviews that I've done is that, um, you know, what differentiates, um, you know, aerial adventure parks from amusement rides and so on, is that you do have more interaction and that's also what participants like, but obviously you have to find the right balance between interaction and, you know, effective risk management, I guess.

B: Yeah. No, for sure. What we call it is Patron Participative Stuff.

[Laughter]

B: Um, so they're taking a lot of ownership. The patron is taking a lot of the ownership of, of their own selves. Is that perceived risk sometimes? Yes. Perceived risk is great, because that's part of it. Um, is it actual risk? Yes, it can be, but that's where, that's where the grey

line is. That's why we're trying to find out where the grey line is. And I return back to, going back to ski lifts. We've had ski lifts that had operators that used to put on the brakes, you know, grab the handle and pull on it and that was the braking system and we've learned, through accidents, that we can't trust that. So, I'm not trying to short-circuit that. What I'm trying to say is that this experience has, and you know, this is 60 years of writing standards and I've been involved for 20-something years of that, that this is where we are today, because these other things happened. Should we not address these other things, at least in theory, at least in conversation, collaboration now? Let's talk about it. I'm not mandating anything. I've got a strong voice, but I don't want to mandate. I want to get people on-board. I want it to be a [intentionally left blank] role. I've got to get people on-board. I've got to get people on-board. I've got to sell it, just like I'm selling you some problem that you've got. I've got to make sure you understand where I'm at.

M: Yeah, no, and I think it's going really well, um, [intentionally left blank] and, um, actually, I've only got a couple more questions left, actually. Um, so, again, going back to leadership, so looking at collaboration in the industry then, what role do you think that leadership plays in ensuring that, um, you know, collaboration can become successful, um, for the, for the entire industry, rather than just a small group?

B: In, in a lot of ways there's a lot of different leadership out there. There's leadership at some of these companies, aerial adventure companies and zipline companies and all that, and they're in the know. Some of the leadership at other, in the user groups, such as, or not user groups, but they're not manufacturing, they're on the side of the, um, the aerial side. Their leadership is different than the leadership running, say, an aerial adventure park. The leadership has got to be educated on the challenges the industry is facing. Not just the numbers and the cents thing. How much I'm going to earn, how safe it is and all these things. In fact, for all that leadership it's just about money, but they need to be educated on all the challenges we're all facing and then they need to be, not necessarily, they just need to be aware of it, so that, one, they send their people to these collaborative events. Um, and if it's a mom and pop type thing where that leadership's actually got [inaudible]. So, it's about money, essentially, and it's about participation and all the, all the processes of the industry. So, not just going to ASTM meetings where the only, um, participants are ACCT folks, a couple of authorities and a handful of people from [intentionally left blank]. We need to get more people from some of these other venues, from around the country to start either buying in to ASTM or ACCT changing their ways. We

need to all come together and create one standard at some point and be using one standard that works for all of us.

M: Yeah. [intentionally left blank], you just mentioned about the mum and pops and all that stuff, um, I mean, given that, um, certainly in this industry, it seems that a lot of stakeholders are small-to-medium enterprises, how do you think this, or does this impact collaboration, do you think? Does it have an impact on it?

B: Oh, certainly. I mean, I think that's, um, half, that's the lifeblood of the industry, not the big guys. So, at the ACCT conference I'm sure they've got all the little guys, not the all the little guys, but quite a few little guys, a lot of the medium guys and mom and pops and all that and that's not being represented, excuse me, not being represented at the ASTM 2959. So, either we've got to come to an idea, all of us, that one standard is a good idea and therefore we're going to engage all the authorities and given them an equal share on our ACCT board and that, that, um, um, um, committee's group for the zipline industry equal representation. Or, two, we continue on our road in ASTM 2959 with predominantly ACCT, [intentionally left blank], [intentionally left blank] people, a few [intentionally left blank] type or couple, the aerials, and a strong representations from the authorities that are developing the standards.

M: OK. Um, and do you, I think we spoke about this in the beginning of the conversation, but I mean, would it be beneficial to create an industry-body, um, in combination with public and private stakeholders, that just focusses on improving risk management procedures in the industry, that's their sole focus?

B: No, yeah, a hundred percent. That's great. If you can pull it off, that's the thing. The issue is, is time and money for all of us. I can't, I'm busy enough that I couldn't go to both, um, aerial adventure meetings at the ASTM side and the ACCT side. There's just no way.

M: Mm. It's the same week as well, isn't it?

B: Yeah, same time. And some of the issues are, are that, here's an example: we have a bunch of industry meetings for ski lifts, for example, and when they have an industry meeting they meet, at the same time they meet all of us people that are involved in the standards development also meet, so we're not, not doing everything at the same time twice. So, we meet for two days developing standards, three days developing standards. The next two or three days are industry meetings. So, in the, so, it would be great if at some point the aerial adventure industry, um, comes down to one group, however that is.

Instead of the ACCT side and the ASTM side and the PRCA. It's just, kind of, a mess. Not a lot of the players are playing in the same sandbox or want to play in the same sandbox. And that's unfortunate.

M: Yeah, it's just, it would be a lot more, um, efficient essentially, wouldn't it?

B: It would be a lot more efficient and, and then it involves all the players.

M: Yeah, OK. OK. Um, [intentionally left blank], I've got one more question left and that's it. Um, what do you think that the future looks like for the aerial adventure industry?

B: Um, I think it's a really bright future. I think it's going to evolve into something that's, um, that is different now. I hope it evolves. I think it should evolve. Um, I'm not saying it's a dangerous industry or it's a bad industry or anything, I think it just could be better. I'm hoping that it evolves in, in a way that the public is represented more than it is today, because I'm only a small aspect of the ASTM 2959 and we're only looking at, like I said, maybe a dozen and a half installations on the [intentionally left blank] lands and we own a ton of land. We have a ton of land. 90 million acres.

[Laughter]

B: Um, so we have, we have, um, you know, 200 or 130 ski resorts out there that are looking at aerial adventure courses and ziplines and all these activities and I'm not sure they're all getting that. At some point we'll hit some maximum, but a lot of them are just started to get involved in it, but that's not, compared to the ACCT world, that's a very small amount, but we all should become on the same, we all should be on the same playing field eventually and we all will be and that'll come about through lawsuits and it would be better if we didn't have to wait for lawsuits. It would be better if all came together on our own accord. So, it has a bright future, it's just going to be an evolving one. Everybody's got to accept change and that's the problem. I think that's the issue. Um, ACCT dug their heels in and the PRCA dug their heels in way early and we didn't have anywhere else to go, but the ASTM 2959.

M: Yeah. I mean, I've heard, I've heard of states that are basically said, you know, until we've had an accident, we're not going to look at regulating the industry and that's, you know, that's, it's insane, really.

B: Right. Yeah, and it's, um, and that bothers me as well. And I think, um, many states already use ASTM 20 or I mean ASTM F-24. They adopted F-24 as their amusement

standard, because many states have amusement rides and, and they would find it rather disconcerting that they require all this stuff for, for an amusement ride in their own backyard, in their own little pond, but, yet, when it comes to ziplines, um, they aren't requiring anything. I think they could really find themselves in really big trouble in terms of lawsuits and, I mean, I'm not saying anything. We're not, we're not going to help them go down, but, I think a lot of states could really, potentially, have some big liability.

M: Yeah, I mean, especially with all the standards out there, right? It's not like somebody is telling you that you have to come up with it yourself, right. It's just, it's there and available.

B: Right and a lot of the states legislators have adopted ACCT, but, yet they also in their books, also in their books, not specifically, adopt the individual codes under F-24. They adopt, as a general regulation, so they don't have to keep updating it, they adopt the amusement standards under F-24. So, we're under F-24, so 2959 should apply.

M: Yeah, for sure. Yeah.

B: To those standards and if they are being constructed, built etc. with professional engineers or aren't getting stamps or aren't doing anything, then definitely that state is, um, liable.

[Laughter]

M: Yeah. Yeah, I would have thought so as well. I mean, I spoke, not for this study, but a previous study I did for my masters degree, I spoke to a state then who basically said, you know, they weren't interested in regulating it in one bit. It was just, it baffled me, because we talked about a perceived risk and all that, and it is a perceived risk, but it's a perceived risk, because it's a managed risk, right, because it's been managed down to a perceived risk, to a certain extent.

B: Right.

M: Um, and, yeah, if, if you don't want to make sure, because there are some rogue operators out there, I'm sure. There's got to be, right? If there's 400 parks out there, there's got to be somebody out there who's, perhaps, cutting a few corners, here and there, one would've thought.

B: Oh, yeah.

M: Um.

B: Sure. And, um, I'm just not privy to all that. I'm sure that there are parks out there that aren't doing it as well as they could be and I think that that's the danger.

M: Yeah, exactly. Well, [intentionally left blank], listen that's all, that's all I have. Thank you very, very much for talking to me today. I'm sorry it took a little bit than an hour.

B: No, that's fine.

M: Yeah, very much appreciated. Um, just by, um, do you have Dropbox at all?

B: I don't have Dropbox. I'm not allowed to use Dropbox currently, um, because on the [intentionally left blank] system, I can't, um, we've had some issues with it. So, um, that's how I've been getting everything up until about 3 months ago.

M: Oh, OK. Yes, because this file is probably going to be about 80mb, which is a little bit bigger than what's allowed for an email.

[Laughter]

B: Yeah, so we will, we will think about and whenever it's ready, we'll communicate via email.

M: Yeah. Certainly the transcript, um, you should have that, for sure, either at the end of next week or early the week after that.

B: No problem.

M: Thank you very much, [intentionally left blank]. You have a great weekend!

B: And, um, good luck on this project.

M: Thank you. Thank you very much, sir. I appreciate it.

B: Take care.

M: Take care. Bye.

Call ended

Appendix VII – Acronyms

Acronym	Meaning	Role/Definition
ACCT	Association for Challenge Course Technology	<p>Founded in 1993, The Association for Challenge Course Technology (ACCT) is the world's leading and largest American National Standards Institute (ANSI) Accredited Standards Developer focused specifically and solely on the challenge course industry.</p> <p>ACCT is comprised of a nucleus of more than 3097 members worldwide (including the United States, Europe, Asia, the Caribbean, Canada, Japan, Korea and Central America) and continues to develop a global alliance of like-minded organizations. (ACCT, 2016)</p>
ASTM	ASTM International	Over 12,000 ASTM standards operate globally. Defined and set by us, they improve the lives of millions every day. Combined with our innovative business services, they enhance performance and help everyone have confidence in the things they buy and use. (ASTM, 2017)
CIRM Group	Collaborative Industry Risk Management Group	
ERCA	European Ropes Course Association	Our association includes European trainers, builders and inspectors of ropes courses as

		well as organizations working with temporary or stationary ropes courses. The board and teams represent the interests of all ERCA members and aim at developing ropes courses further. At least once a year a general meeting takes place offering the opportunity to set standards, to give the teams assignments, to define new teams and organize workshops and conferences dealing with our topics. (ERCA, 2017)
ERM	Enterprise Risk Management	<i>'[...] a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives'. (COSO, 2004:2)</i>
IERM	Industry-wide Enterprise Risk Management	
PRCA	Professional Ropes Course Association	Professional Ropes Course Association - ANSI ASD (ANSI) Accredited Standards Developer (ASD) for Challenge Courses, Canopy ZipLine Tours, and Aerial Adventure courses. Current Published Standard: ANSI/PRCA American

		<p>National Standard (ANS) 1.0-.3-2014 - (March 3, 2014)</p> <p>Welcome to the Professional Ropes Course Association (PRCA). The PRCA is a contemporary and progressive industry association that supports the development and regulation of the ropes challenge course, canopy zip lines, and aerial adventure parks industry. Established in 2003, the PRCA has many accomplishments including industry insurance programs, becoming the first ANSI Accredited Standards Developer for the industry in 2005 and having the first ANSI designated comprehensive industry safety standards.</p>
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