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Growth Hacking as an approach to producing growth amongst UK

Technology Start-ups: An Evaluation

Abstract

Purpose

'Growth Hacking' is a 'data-informed' marketing approach that uses digital marketing tools and tactics as well as traditional marketing channels to help technology companies show 'proof-of-concept' and sustainability before gaining funding. The research purpose was to

attempt to identify and understand the relevance and importance of growth hacking and to

identify what growth hacking tools and techniques are used by such organisations.

Approach

The main research method for the collection of primary data was in-depth interviews with both

industry experts (senior professionals working for growth hacking agencies) and individual

growth hacking practitioners who work for technology start-ups based in the UK. Interviews

included the use of dimension cards with key growth hacking terms to act as visual cues to

facilitate focus and prompt reflection.

Findings

In addition to a data analysis element, growth hacking also requires people to spot emerging

opportunities before anyone else does. This makes it very difficult to find people with the right

skill-set. It is also important to use traditional marketing methods to bridge the gap between

the physical and digital world.

Value

This research shows that growth hacking is a mind-set and process that can help technology

start-ups grow quickly with a limited marketing budget. The research offers guidelines and

frameworks for start-ups to understand the growth hacking process. The concept has direct

synergy with agile marketing and this might be a term/ methodology with which people in the

UK may feel more comfortable given the negative connotations of the word 'hacking'.

1. Introduction

Although investment firms believe that the UK is a hub for emerging high-growth digital companies (Gale, 2014), the environment is becoming noisier (Deloitte and UK Business Angels Association, 2013), and therefore such companies need to prove market growth and sustainability to get noticed. This comes at a stage when technological change is exponential (Kurzweil, 2001). It took the oil tycoon John D. Rockefeller 46 years to make a billion dollars, compared to the 4 years for the founders of Yahoo, 3 years for the founder of eBay and just 2 years for the founder of Groupon (Snow, 2014). Start-ups are particularly under extreme resource constraints and need to break through the noise to let their target customers know they have a superior solution for a critical problem. A start -up can be considered to be a temporary organisation which is seeking a successful business approach (Blank, 2013) and a key characteristic of a start-up is the pursuit of growth. After all, new firms exist to transform entrepreneurial judgement into profit (Spender, 2014) and through the start -up phase, new ideas are brought to the market and transformed into economically sustainable enterprises. Start -ups represent a powerful engine of innovation and thus play a key role in innovation processes (Davila et al, 2003; Spender et al, 2017)). Although they suffer a lack of tangible and intangible resources, adopting innovation practices is necessary for start-ups to overcome both liability of newness and being small (Bogers 2011). These technology based firms are the most common introducers of disruptive technologies and a leading driver of creative destruction (Spencer and Kirchhoff, 2006). Creative destruction is "a process that incessantly revolutionises the economic structure from within, destroying the old one and incessantly creating a new one" (Schumpeter, 1942 p83). Such firms are unlikely to have an existing customer base to which they need to cater, so they are able to approach problems without any 'baggage'. Similarly, they are not committed to high investment in old technologies, are not constrained by organisational inertia and are more likely to be idea driven. Eighty seven per cent of large businesses stop growing (Olson and Bever, 2009) whilst companies that 'pivot', i.e. switch business models or products while on an upward trend, tend to perform much better than those that stay on a single course (Snow, 2014). This 'lean start-up' tactic seems to be successful in that start-ups that pivot once or twice raise 2.5 times more money, have 3.6 times better user growth and are 52% less likely to scale prematurely (Start-up Genome Report,

2011). Also, being at the beginning of the application of a particular technology there is little need to worry about such an application running out of steam.

Networks affect start-up innovativeness, job growth and ability to attract funding (Lundberg, 2013). Research also indicates that forming relationships with external partners is a priority for the success of start-ups (Teece 2010, Pangarkar and Wu 2012, Kask and Linton 2013). In a similar vein, Neyens et al (2010) found that continuous long term alliances with customers, suppliers and competitors have a positive effect on ability to generate radical innovation. Intermediary organisations such as technological service firms, accounting and finance firms, law firms and talent search firms are equally important. Having relations with this type of organisation is positively related to New Venture product innovation (Zhang and Li 2010), although Wang and Fang (2012) found that network strength affects new firm's innovativeness.

Clearly, entrepreneurial skills are important in a start-up's innovation processes. Stiglitz and Driffill (2000) defined "entrepreneur" as the person who creates new businesses, brings new products to market or develops new processes of production and within the present context, this would include activities such as identification of opportunities, mobilisation of resources and the creation of an organisation. Spender et al (2017) found that entrepreneurial experience positively influences the entrepreneur (Hayter 2013) and that entrepreneurial activity is enabled in the network around the entrepreneur.

The role of customer can be important in the innovation process for start-ups in terms of being a source of technological know-how (Von Hippel, 1986, 1988 and Hamel and Prahalad,1991). Blank (2013) identifies Two Phases of start-up development: Search and Execution. The former comprises Customer Discovery and Customer Validation (with the possibility of 'pivoting' if there seems to be little initial customer interest) and the latter comprising Customer Creation and Company Building. Strategic and tactical activities may help a company's chance of survival, and this is likely to be closely tied to scalable growth (Coad et al, 2013). When looking at particular types of customer, Moore (2014) argues there is a 'chasm' between the early adopters (Rogers, 1962) of the product (considered as 'Lead Users' by Von Hippel, 1986) and the early majority and believes these two groups have very different expectations. He explored these differences, and suggests techniques to successfully cross the "chasm." According to Moore, if a successful firm can create a bandwagon effect in which enough momentum builds, then the product becomes a de facto standard. Similarly, Hamel

and Prahalad, (1991) identify the application of 'expeditionary marketing': low-cost, fast-paced market incursions designed to bring the target quickly into view. It is in this context that growth hacking has emerged (Crawford-Brown, 2013). Growth hacking takes advantage of the connected world where digital experiences can spread rapidly (Ellis, 2014). Some see a close link between marketing and technology (Deeb, 2014a; Chen 2011) and use the term 'Growth Hacking' in this context.

2. Technology start-ups and the new market environment

2.1 Lean/Agile Marketing

Based on Lindblom's (1964) 'Science of muddling through', a set of adaptive management techniques that are collectively known as 'Lean/Agile' methodologies are now being implemented. Instead of comprehensive analysis of every policy option, there is 'incrementalism' or a "muddling through" of behaviour on the part of decision makers. For Freeling (2011), "agile marketing" consists of number of key features: Being immersed in customer experience, understanding the fitness landscape and developing rules of thumb in this landscape. In addition, extensively using pilots and prototypes and conducting experiments using new technologies are core to this approach as are questioning using both qualitative and quantitative techniques. This type of marketing requires defining and communicating the intent of new offers clearly via briefing and back briefing ensuring that individuals in marketing and other functions are free to adjust their actions in line with this intent. This Agile marketing approach is particularly relevant for technology start-ups because they do not have the resources to invest a lot of time and money into a big idea that might not work. Instead, this methodology is based on implementing smaller iterative projects quickly and cheaply; then making decisions based on testing and data, rather than opinions and experiences (Moth, 2014). According to Hopkins (2014), one of the strategies for Agile marketing is a move towards 'strategic pivoting', which links to the concept of the lean start-up noted above.

According to Kaykas-Wolff et al (2014) 'Agile Era' businesses need to present something to the world, test it using digital methods and then move on based on what they have learned from such an assessment. One of the most used Agile methods is Scrum, which has come from a product development setting. The traditional approach to the product development process is

like a relay race – one group of specialists passing the baton to the next group. However, in order to excel in a competitive market speed and flexibility is needed. This is where a holistic or 'rugby' approach is needed (i.e. Scrum) – the team works together as a unit from start to finish, passing the ball backwards and forwards (Takeuchi and Nonaka,1986). Several companies around the world have very successfully adopted Scrum into their marketing systems (Izvercianu & Buciuman, 2012).

The explosive growth of marketing technology has meant that rather than spending several months planning a marketing campaign in great detail, marketers can try out initial ideas and use the outcomes to refine a campaign. using 'Test, Learn and Commit' loops (a process that has emerged from the software development industry). This argument is backed up by Forrester Research (Ramos, 2013), who found that the traditional annual planning route is now outdated as marketing leaders say that conditions change too quickly to keep plans current and up to date. Closely linked to the concept of lean/agile marketing, is the process of 'growth hacking'.

2.2 Growth Hacking

Although there seems to be no universal definition of growth hacking, its commonly agreed function intersects product development and marketing, and is focused on customer and user acquisition, activation, retention, and upsell (Bussgang & Benbarak, 2016; Deeb, 2014a). Growth hacking brings marketing and technology together. As well as the qualitative aspects of marketing, there is also the need for the more technical aspects of code and data (Jenkins and Gregory, 2003; Brinker, 2014). A growth hacker uses emails, pay-per-click ads, platforms and platform application programming interfaces (APIs) to build testable, trackable, and scalable strategies (Holiday, 2013) with the main aim being for marketing to reach millions by itself (Holiday, 2013; Patel & Taylor, 2013). Growth hacking is important to start-ups as they are usually lacking budgets for marketing and traditional marketing experiences (Holiday, 2012). Growth hacking aims for rapid business growth using very small budgets, by utilizing the advantage of the network of Internet and data-rich properties (Vasquez, 2014)). There has been a growth of hybrid marketing professionals, also known as 'Marketing Technologists' (Lungaard, 2014). Modern marketers have to be Pi-shaped (II), to fit into the skill-set needed to be a growth hacker (Mortimer, 2012) They need to be analytical but also understand

qualitative marketing. However, despite understanding the level of importance of technology, keeping up to date with digital technology is one of the greatest challenges marketers face (Hays, 2014). Marketers' lack of digital skills is potentially a big issue in today's technological environment because one of the consequences of digital innovation has been an explosion of digital channels or 'new media' (Brinker, 2015). In the past, different types of media were placed into silos; however, in today's digital landscape they are converging and brands need to consider integrating paid, owned and earned channels to make marketing more effective (Lieb, 2012). Despite the exponential growth of new media channels, more traditional marketing channels are still very important. Weinberg & Mares (2014) found that too many start-ups focus on the same channels but instead of making educated guesses, they believe they should run cheap tests on validated assumptions to provide research data on what actually works best. They have identified many 'traction' channels to help grow a business, and these are a mix of offline and online marketing methods. Deciding what traction channels to initially test will depend on what a start-up is trying to achieve and in what area growth will have the largest impact. McClure (2007) recommends reviewing five key metrics from a 'customer lifecycle' to help successfully grow a business. These are called 'Pirate Metrics' because the acronym is AARRR (although Croll and Yoskovitz (2013) note that these five elements do not necessarily follow a strict order):

:

Acquisition: Users come to the site from various channels

Activation: User enjoys first visit – 'happy' user experience

Retention: Users come back, visit the site multiple times

Referral: Users like the product enough to refer others

Revenue: Uses conduct some monetization behaviour

A thematic analysis (Braun & Clarke, 2006) of the presentations from 17 speakers at a Growth Hacking Conference (2014) clearly highlights the following key elements of a growth hacking campaign: Product /Market Fit, User Data Analysis, Conversion Rate Optimisation, Viral Growth and Retention / Scalable Growth.

2.2.1 Product/Marketing Fit

This is an important part of the 'Search' phase of Blank's model (2013). A minimum viable product (MVP) should be presented to customers as early as possible with feedback sought via surveys and tests (Ries, 2011; Holiday 2013) to ensure that a big enough segment considers the product/service to be a 'must have'. Technology start-up investors require 'proof-of-concept' before releasing funding (Preger 2016), so that key marketing metrics can be provided to prove sustainability. However, the caveat to this discussion is that Gans et al. (2000) believe that there are many nuances to product development and venture-based start-ups and suggest that many innovation-oriented start-up firms serve as upstream suppliers of technology to established firms rather than potential sources of disruption to current market structure. This idea is supported by Theil (2014), who claims that the perfect target market for a start-up is a small target audience served by few or no competitors. He believes that trying to enter any large market is a bad choice for technology start-ups and a large market already served by competing companies will erode profits.

2.2.2 User Data Analysis

One of the key challenges faced by start-ups, is that there is so much data available it is becoming increasingly difficult to understand *how* the data can be used to create actionable insights (Mucklow, 2014). User data analysis should be a mix of quantitative and qualitative information. This comprises five main areas: technology analysis, (eg. conversation rate per browser); heuristic analysis, (eg. relevancy, online value proposition); web analytics (eg. flow reports, qualitative surveys); usability testing. This analysis can then be used to test hypotheses' relating to user growth.

Cohort analysis is one of the most important tools of start-up analytics (Reis, 2011). This is based on the premise that instead of looking at cumulative totals or gross numbers, data is broken down into the performance of each group of customers (a cohort) that comes into contact with the product independently (Skok, 2013). This method helps start-ups understand customer flows, which provides more predictive power than traditional gross metrics.

One of the main challenges facing a start-up during the launch stage, however, is having enough customers to provide meaningful data (Chen, 2013). This is why Product / Market Fit is so important, so that the product initially 'sells itself'.

2.2.3 Conversion Rate Optimisation

Data can then be used for Conversion Rate Optimisation (CRO) to help build an effective growth engine. Ellis (2013) explains this process in his 'conversion rate optimisation loop' which involves understanding visitors, prioritising planning in response to this, then testing and analysing which link back to an understanding of visitors. Companies that achieve higher increases in sales seem to be taking a more 'strategic' approach to conversion rate optimisation and are running a higher number of tests, using a structured approach with a wider variety of methods, (Econsultancy in association with RedEye, 2014).

2.2.4 Viral Growth

In order to achieve high growth quickly, marketers are turning to alternative strategies, such as viral marketing. Viral marketing involves product information diffusion and its network adoption (Leskovec et al , 2007). The growth of social media has dramatically changed the web's collaboration structure and therefore social influence diffusion is a key aspect of viral marketing (Zhu and Huberman, 2014). Growth hackers are particularly focused on identifying 'influential' users in a social network and finding key metrics that drive growth but viral growth can also be obtained by early adopters' using traditional advertising and PR coverage (Goel et al, 2012; Klein,2014 and Brown, 2014). Vohora (2012) recommends using a hybrid model, which uses viral and non-viral channels to achieve strong and sustainable growth. Croll and Yoskovitz (2013) believe that there are three types of virality:

- **Inherent virality** which is built into the product and happens as a function of its use
- Artificial virality which is forced and often built into a reward system
- Word-of-month virality which is when conversations are generated by satisfied users (independent of a product or service)

2.2.5 Retention / Scalable Growth

Growth can be more about retention than acquisition (Reicheld and Schefter, 2000). Growth hackers understand the value of loyalty and customer retention, so it is embedded in their business strategy (Quint, 2014). Customer advocacy is measured for Lifetime Value Modelling via Net Promoter Score (NPS) This is linked to viral coefficient measurements because customers are asked 'will you recommend us?' and are then segmented into Detractors, Passives and Promoters.

2.3 Conclusion

The above provides an insight to the key elements of growth hacking for UK technology startups and indicates some of the barriers to implementation. This perspective is from a broad, business-management overview but provides the researcher with a general framework to further investigate the topic with primary research. Therefore, the following conceptual framework was used to provide guidance for the in-depth study into the use of growth hacking and help define what components a campaign is most likely to consist of:

Insert Figure 1 Here

This framework has been developed by merging the characteristics of a start-up (Blank, 2013) with the Lean Start-Up model developed by Ries (2011) to form the outside 'search phase' and 'execution phase'. The middle 'growth hacking' section reflects the growth hacking model produced by Ellis (2013) and has been depicted in a circular shape to convey the fact it is a continuous process. The middle loop of 'analytical tools used throughout the process' are elements taken from the measurement metrics / tools mentioned within the growth hacking process of: user data analysis, conversion rate optimisation, viral growth and retention.

3. The Research Project

3.1 Purpose/Approach

The research aimed to understand the relevance and importance of growth hacking within a technology start-up business and to identify what growth hacking tools and techniques are used by UK technology start-ups to build rapid user growth. An inductive research approach was selected, beginning with a substantive literature review which in turn informed the empirical study. The literature review aimed to draw together themes and conceptual frameworks enabling the development of an indicative model. This model (figure 1) was then evaluated in terms of it being a true reflection of what is happening and adapt it, if necessary, following a deeper understanding of the topic via empirical data. Applying a critical realism philosophical position aimed at understanding the reasons and ways technology start-ups are using growth

hacking (Saunders et al., 2012), this empirical data may then be used as a precursor for recommending best practice. The purpose of the study was to find out individuals' perceptions of growth hacking (to explain events), as well as describe the use of growth hacking within their organisation and the outcomes it has achieved. The research question therefore was focussed on how technology start-ups were using growth hacking to generate online growth A qualitative approach has been taken because the research topic places an quickly. importance on context (i.e. UK technology start-ups), therefore a high level of descriptive detail is needed to help understand the social behaviour of growth hacking within this specific environment (Bryman & Bell, 2011). Also, because the term 'growth hacking' was first devised in 2010, it is important to make sure the phenomena is clearly understood/ defined by all respondents from the onset, to help overcome data analysis limitations. Although participants selected for qualitative studies are not meant to be representative of an entire population (Bryman & Bell, 2011), this has been taken into consideration when the research strategy was devised and when analysing the data. It is recognised that there are some limitations to a qualitative methodology but as the topic has been relatively academically unexplored, the research will have value in engendering further debate or lead to further lines of enquiry (Biggam, 2011). The research objectives were:

- To attempt to understand the relevance and importance of growth hacking within a technology start-up environment
- To identify what growth hacking tools and techniques are used by UK technology start-ups to build rapid user growth quickly
- Following the outcome of research findings, to formulate recommendations regarding the use of growth hacking by UK technology start-ups to help achieve high online growth within a short time-frame,

3.2 Research Method

The main research method for the collection of primary data was in-depth interviews with both industry experts (senior professionals working for growth hacking agencies) and individual growth hacking practitioners who work for technology start-ups based in the UK. By using depth interviews, an understanding of the respondents' world, their beliefs and opinions surrounding the concept of growth hacking and its application could be developed. It was hoped that themes and issues that might have a broader relevance and application could be identified.

Interviews were particularly useful in the context of this research project because they helped provide an insight into people's behaviour and experiences (Myers, 2009) and provide rich insight from key industry experts who can provide privileged information (Denscombe, 2007). Due to the nature of the topic and the fact it is a relatively new phenomenon, semi-structured interviews were used to help make sure important themes were covered but the process was kept open for the participant to answer in their own way (Fisher, 2010). This flexibility allowed for a modification of questions and helped lead to new theories (Bryman & Bell, 2011).

Key themes within the semi-structured interview included:

- Definition of 'growth hacking'
- It's relevance and importance for a technology start-up company
- Key elements of a growth hacking campaign
- Limitations and challenges of a growth hacking campaign
- Outcomes from implementing a campaign

Two of the questions included the use of dimension cards with key growth hacking terms (based on secondary research) to act as visual cues to facilitate focus and prompt reflection. The cards had the following terms written on them:

- Product / Market Fit (Minimum Viable Product)
- Pivot or Persevere
- Conversation Rate Opitmisation
- User Data Analysis (Quantitative and Qualitative)
- Test & Analyse
- Viral Growth
- Customer Retention

During the interview, the following process was implemented when using the cards (adapted from Rowley et al, 2012):

• The interviewee was asked to describe what each dimension term meant to them, from a growth hacking perspective. The cards were in a randomised order and the terms related to the conceptual framework devised from the Literature Review. This

- approach allowed the researcher to test the conceptual framework and gain deeper insights into how growth hacking is implemented in tech start-ups.
- Interviewee feedback on the suitability of the dimensions. The researcher provided the interviewee with a pen and Post-It note to add any dimensions that they felt were missing; they were also asked to verbally explain the reason(s) why. This was designed to test the reliability of the framework by 'member testing'.
- *Prioritisation of the dimensions*. The interviewees were asked to prioritise the cards in terms of importance for tech start-ups in the context of growth hacking. This helped determine the strategic importance of the different elements of the cards, so that the conceptual framework could be adapted to reflect practitioner insights.
- *Mining the data*. Transcripts from the interviews and additional written notes were coded and prioritise to help develop a revised growth hacking framework.
- Revising the first conceptual framework. The findings from the 'game card method'
 and the rest of the semi-structured interviews were compared and analysed against the
 Literature Review and initial conceptual framework, to help develop a more accurate
 reflection of how growth hacking is actually practiced.

The semi-structured interviews took place face-to-face (whenever possible, if not, Skype calls were utilised), within the participants' chosen environment.

As 'Growth hacking' is a new concept there are a limited number of people who seem to be practicing the discipline (as seen from the Literature Review). Due to the nature of the research, sample participants were within the following homogenous group: have a job as a growth hacker and/or be involved in growth hacking for a UK technology start-up. A sample of 11 interviews was achieved with the average interview length being 41 minutes.

Practitioners from growth hacking agencies based in the UK were sought via specific searches for UK 'growth hackers' via two professional social networks – LinkedIn and Twitter. This approach also provided the opportunity for undertaking 'background checks' on potential participants as thought leaders in this very specific area of digital marketing.

After completing data collection, professionally transcribed documents from the audio recordings and written notes from the interviews were analysed via a coding method. This followed a thematic analysis developed by Braun & Clarke (2006). The process of coding the data did not try to fit it into a pre-existing coding frame. The conceptual framework produced to summarise secondary research findings, was then revisited and adapted after

primary research analysis. Braun & Clarke's (2006) six-phase approach to analyse the data was used.

4. Key Findings and discussion

4.1 Growth Hacking's Relevance and Importance for UK Technology Start-Ups

There was clearly some confusion regarding the understanding of the term, 'growth hacking' and definition was very much influenced by the original background of the growth hacker i.e. if marketer or developer. For example, one of the marketers commented:

"... for us, it kind of means different things like cutting to the chase, doing things quite quickly, being quite creative and creative use of technology and data."

Whilst one of the developers noted:

"because it's growth, which is marketing, mixed with hacking, which is software development. The thing that everyone has realised is that data science is the crucial thing to mix the two together".

The role should also include Technologist, Coder/Developer, Data Analyst in addition to Marketer. This reinforces the view that marketing has become a technology-powered discipline (Brinker, 2015).

It would seem that start-ups, who understand and appreciate marketing at an early stage, have a better chance of succeeding and most interviewees believe that a key aspect of growth hacking for accelerated growth is about applying marketing differently and using new/emerging communication channels. The only way to stand out and gain traction is to position a product away from the crowd and leverage new channels and other peoples' audiences.

One respondent believed that one of the reasons why growth hacking is so important for UK technology start-ups is because British venture capitalists are more cautious than those in America and want to see a clear revenue stream before they invest i.e. 'proof-of-concept' (Deeb , 2014b). The growth hacker mind-set of implementing small projects quickly and

cheaply to test ideas and then making decisions based on testing and data (Moth, 2014), is therefore ideally suited to UK technology start-ups.

4.2 Key Elements of Growth Hacking

It would seem that Growth hacking and Agile Marketing are very much aligned, Indeed, it was possible to link the research findings to key features of Agile Marketing. The research findings indicate that all previously noted Agile Marketing elements are equally important in growth hacking. More specifically, the following elements identified by the literature were also assessed in the research.

4.2.1 Product Market Fit and Pivot or Persevere

Although the literature portrayed product market fit (PMF) as a part of growth hacking, many respondents felt this element had a more strategic role within the overall business and that growth hacking occurs after a start-up has achieved PMF. Participant 3 felt that "People who try to scale their marketing before product market fit, waste money." Ultimately, "If there's no demand for the product, it's very unlikely to succeed." (Participant 7). This view reflects that of Thiel (2014) and Ellis (2014), who believe that if a product needs a 'hard push' to sell it, it is not good enough.

The lean start-up concept of building a minimum viable product and testing it to gain user feedback for product improvements (Ries', 2011; Blank, 2013) resonated with most of the interviewees.

"Building things is quite expensive, so rather than launching a 'perfect' product, test the concept and refine it from user feedback"

4.2.2 Test & Analyse and Conversion Rate Optimisation

All of the participants put 'test and analyse' and 'conversion rate optimisation' together as a core part of growth hacking:

"Data-informed marketing, doesn't just put the whole budget behind a campaign because of gut feel." (Participant 9).

This philosophy is reflected by Weinberg & Mares (2014), who believe that start-ups should run cheap tests on validated assumptions to see what actually works best. This experiment-driven marketing approach is very much aligned with agile marketing and its 'Test, Learn and Commit' loops (Freeling, 2011; Moth, 2014).

The main difference between respondents' feedback of 'analyse and test' and 'conversion rate optimisation' (CRO) is that the latter was more focused on strategy and mind-set and the former had a more tactical standpoint:

"Analysing 'emotion' is important – trying to work out why people do things and taking people on emotional journeys to the point of conversion"

"It involves analysing results and looking at key indicators"

4.2.3 User Data Analysis

All of the interviewees expressed the importance of both quantitative and qualitative types of information. The general consensus was that quantitate data is useful to describe *what* is happening on a website or mobile app. but qualitative information will help explain *why* things happen. Although it is widely recognised that both types of data analysis is important, some respondents noted that gathering qualitative data does not always happen and often gets ignored by start-up companies. This may be because technology start-ups may not have the skill-set to conduct this type of analysis or might not know that it is something they can do.

All of the participants mentioned a range of tools to help start-ups and gather information for user data analysis (these are also used for CRO and testing and analysing). These include: Google Analytics, Mixpanel, Kissmetrics, Optimizely

4.2.4 Viral Growth

Interviewees had mixed views on viral growth and most focused on *one* of the three types of virality described by Croll and Yoskovitz (2013). Most growth hackers mentioned that the product had to be right (i.e. it has Product Market Fit) before viral growth happens. Even then, most participants agreed that achieving virality is very difficult:

"Products that go nuclear because they have an element of virality built into them is because it's intrinsic, not because someone's found a way of tagging virality into it"

However, there was also an understanding that 'artificial virality' can be used to generate growth. For example, features can be added for users to collaborate on whatever they are doing or there can be a referral programme and users can be offered a free month if they get someone else signed up to the product, so that both parties benefit.

However, "...people think they are going to have a viral business. However, you can't build a viral business; you have to build a business that goes viral."

Five Participants mentioned that the key measurement for viral growth is to achieve a viral coefficient (or K-Factor) of more than one (Patel, 2011 and Ellis, 2012). However, some noted that trying to use the K-Factor 'formula' is extremely difficult because it is so hard to get any raw data on viral growth.

4.2.5 Customer Retention

Primary research indicates that all of the growth hackers interviewed believed that customer retention was extremely important :

"Retention is the most important metric in any business. Having 100,000 people sign up but none of them being retained is useless. Having ten people sign up but all of them being retained is better...I think everything should be centred on how you retain a customer. And actually, the reason that a customer buys your product in the first place is all about how you retain them in the long-run."

A number of respondents echoed Reichheld and Schefter's (2000) claim that it is less expensive to bring back an existing customer than to acquire a new one.

Despite the perceived importance of customer retention, a few interviewees admitted that the industry is not focusing enough on it. One participant believes that this is because technology start-ups do not have the ability to manage customer retention and even large organisations are struggling with it.

All of the growth hackers mentioned metrics and tools to measure customer retention with measuring the churn rate being the most important metric discussed.

4.3 Effective Offline Channels for Growth Hacking

Despite growth hacking being perceived as a 'digital' form of marketing (Econsultancy, 2014), this research supports the view that more traditional forms of marketing are just as important for Growth Hackers.

"...the best marketers don't think online and offline. They think, 'who am I talking to? What am I trying to achieve and what are the best ways in different media and in different environments to achieve my objectives?"

The number of more traditional marketing channels use by growth hackers to gain traction supports the view that a number of different marketing channels should be considered and tested to help achieve growth (Weinberg & Mares, 2014).

4.4 Limitations and Challenges of Implementing Growth Hacking for UK Technology Start-Ups

In addition to a lack of people having the relevant skills, there are other potential barriers. Growth hacking is expensive in terms of time and most technology start-ups want to jump in feet first. Most say what they do and leave it to the users to interpret what it means for them rather than leading with the benefits and many technology start-ups want to keep every function in-house despite the lack of a 'growth hacking' talent base.

UK Technology start-ups would seem to be scared of failing but in America (where growth hacking has come from), they are much more forward thinking and more accepting of failure.

4.5 Revised Growth Hacking Framework

The initial growth hacking framework resulting from a review of the literature (Figure 1) was shown to Participants for feedback. The main points raised were:

- Remove Product Market Fit and Proof-of-Concept because they are not growth hacking
 these should be done before growth hacking starts
- The framework is too 'technical and analytical' it is missing essential branding elements/ marketing channels

- Technological tools need to be added
- There are areas of importance that are missing: growth mind-set, team, coding, automation
- The middle iterative testing loop is a key part of growth hacking

Bringing together all the primary research, a revised growth hacking framework has been established (see Figure 2 below).

Insert Figure 2 here

5. Conclusions and Recommendations

It would seem that growth hacking can only be undertaken with a good product that has achieved a Product Market Fit and is most effective when it is implemented by a multi-disciplined *team* of marketers, data analysts, coders/ developers and people who use and understand technology.

The core principle behind growth hacking is to quickly and cheaply test a marketing idea, use data to analyse the outcomes, and to iterate, optimise, implement or change the experiment. Running A/B tests and checking data with analytical software such as Google Analytics, Mixpanel and Optimizely are essential components to this process. However, despite the high data analysis element of growth hacking, it is an extremely creative process that requires people to "swim against the flow" and spot emerging opportunities before anyone else does. This dichotomy of 'art and science' makes it very difficult to find people with the right skill-set; which is why building a growth hacking team is so important.

Although digital marketing is a key element of growth hacking, it is also important to use traditional marketing methods to bridge the gap between the physical and digital world. To generate high growth, start-ups need to think creatively and use different traction channels to everyone else (or use the channel in a more innovate way).

In conclusion, this research provides guidelines and frameworks for start-ups to understand the growth hacking process and is an implementation enabler. It has shown that growth hacking is a mind-set and process that can help technology start-ups grow quickly with a limited marketing budget. However, it requires a particular skill-set of Pi-Shaped marketers that are not easy to find, which will limit the development of this marketing approach in the UK. The concept has direct synergy with agile marketing and this might be a term/ methodology that people in the UK feel more comfortable with because of the negative connotations associated with the word 'hacking'. Despite this potential issue, the concept is still very new (it was devised in 2010) and if more studies and media coverage are given to the topic, it has the potential to gain fast growth because the ideas and principles behind it make good business sense. Perhaps this means that the term itself needs a growth hack?

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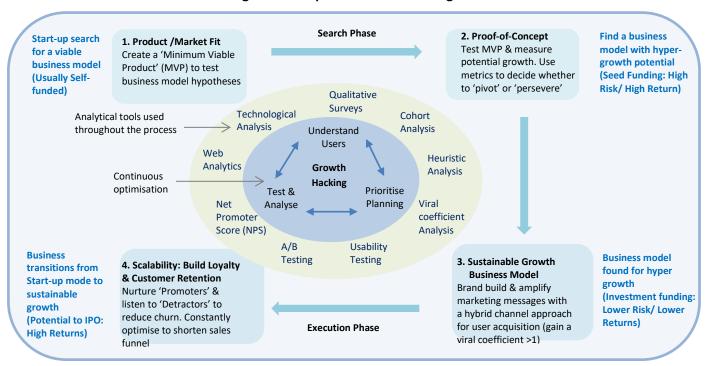


Figure 1: Proposed Growth Hacking Framework

Figure 2: Revised Growth Hacking Framework

