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Knowledge Management and Organisational Culture

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Knowledge management exists to make the most of knowledge in an organisation. It is concerned with identifying and leveraging the collective knowledge to provide an organisation with a competitive advantage (Alavi and Leidn 2001). The use of knowledge is the point, not the knowledge or knowledge management per se. This implies that knowledge can be used to improve the performance of an organisation, and so when we talk about knowledge management there is an implicit emphasis on organisational change in general, and specifically on changing organisational culture (Massaro 2015). To this end, knowledge management has evolved from an interest in information management, through an emphasis on knowledge-sharing and more recently to ways of understanding the impact of knowledge management on organisations and their culture (Holste and Fields 2010). Attempts to change organisational culture are intended to lead to continuous improvement, with a view to increasing competitive advantage (Chang and Lin 2015; Li et al. 2013). In this content, knowledge management is a means to organisational learning (Allameh et al. 2011).

The case for knowledge management is often made a strategic level. The drivers, however, are in fact more prosaic, and result from two dramatically opposite approaches to overall organisational approaches. Margins are central to viability and profitability; they are maintained through the different strategies of cost control and added value. Ironically, knowledge management is seen to be a panacea for achieving both. If cost control and associated price

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leadership is the core organisational strategy, then knowledge management is considered by management as the means by which production and cost control is achieved. In a value strategy, knowledge management provides information that is concerned with the maintenance of quality of the offering. Both have the same effect in practice—they provide management information on operations that allows for the sanctions and rewards of staff based on monitoring their performance. This techno-surveillance of the workforce becomes an artefact; it impacts espoused value and affects assumptions, thus influencing organisational culture. Knowledge management systems (KMS) report on many aspects of performance relating to the efficiency of the workforce, and the information that they generate can be used as the basis to impose sanctions. Ultimately, this can also make those that are no longer deemed necessary redundant or can change the way that they work, in order to enhance their performance.

In this chapter, we draw on a combination of the extant literature and our own organisational case study to discuss aspects of knowledge management and organisational culture.

The case study is an exploration of the implementation of a KMS in a public authority, referred to as Authority Alpha. We use it here as an example of the nature and impact of the implementation of a KMS on the workforce and management activity and attitudes. We draw on the implementation, the changes and the impact on organisational culture that resulted from the introduction of this radical new approach.

The organisation, which provides a wide range of public services, introduced a KMS in the form of an enterprise system because it was deemed to be under-performing. The services provided by the organisation include: welfare advice; business services; community services; education; environment and planning; health and social care; housing; jobs and careers; leisure and culture; and transport and highways. The under-performance was attributed to the workforce and this assumption underpinned the introduction of the KMS; thus, it was implicit that that the surveillance was introduced to control workers' behaviour and maximise performance.

We establish first why organisational researchers are interested in the relationship between organisational culture and knowledge management. Next, we address organisational culture, its key relationship with knowledge-sharing, and the wider relationship between technology and culture. We then go on to discuss the relationship between KMS and performance management, followed by the impact of the KMS on the culture of an organisation.

Knowledge Management Systems and Organisations

The purpose of KMS is to support the creation, transfer and application of knowledge in organisations (Alavi and Leidn 2001). They are IT-based information systems designed to integrate and codify knowledge throughout the adopting organisation. Knowledge is typically shared through a centralised database, which all areas of the organisation can access, manipulate and update (Alavi and Leidn 2001; Davenport 2000), enabling real-time access to organisational knowledge across diverse organisational functions, units and geographic boundaries. In this chapter, KMS refers to the entire enterprise-wide system and the technology underpinning it, as well as the adopting organisation's social context.

Organisations have used the adoption and implementation of KMS as an occasion for change, renewal and restructuring that is often the source of problems and tensions. Knowledge management systems have been shown to facilitate change and underpin the enabling of organisational performance (Bloomfield and Hayes 2009), and importantly they also inculcate—often extreme—surveillance through enforced sociotechnical interactions. This surveillance can take various forms: it can be rendered through the information technology architecture; it can be exercised covertly or overtly; it can be deployed through a vertical hierarchy in which managers observe workers; it could be a self-surveillance system; or it could instil power in people to control or empower others. These various forms of surveillance can have major impacts on organisational culture. From an organisational management point of view, control in the workplace becomes increasingly important when people are viewed as the main problem in productivity. Employers have sought to regulate, direct, constrain, anchor and channel activity for the purposes of sustained, often repetitive, productive activity (Zuboff 1988). To control these factors, tools have been developed and utilised to control people and influence organisational cultures.

In just-in-time manufacturing and total quality control production regimes, the plant layout provides management with visibility onto workers' activities, creating and necessitating cultures and systems of surveillance supported by human resource management practices (Sewell and Wilkinson 1993). In this view, a KMS facilitating surveillance can be used to improve workers' performance, suggesting that surveillance is built into the adopting organisation's human resource management policies to this end. These control techniques render workers' activities visible through the KMS, and enable the

enforcement of disciplinary actions should the prescribed norms not be achieved. Knowledge management systems can therefore be used to improve workers' performance by altering their behaviour and thus challenging the espoused values and assumptions impacting on organisational culture (Janz and Prasarnphanich 2003).

Organisational Culture

Organisational culture is essentially about the values, beliefs and norms that form the group culture in a community of work. It comprises artefacts, espoused values and assumptions. Artefacts are the visible elements, processes, structures, goals, climate, dress code and furniture; they are seen, but not necessarily understood, by everyone. Espoused values are shared assumptions of how the organisation should operate. Mismatches between leadership/senior management and other groups lead to serious discomfort and disharmony or even conflict. Assumptions, often tacit, are the views of human nature and values.

The two major problems with organisational culture that make it difficult to change concern reaffirmation and longevity. Culture is reaffirmed and consolidated by rewarding those who conform and, conversely, by rejecting those who do not fit in. It gains longevity and endurance as it is founded on learned responses, the historical bases of which have often been forgotten, and so outdated and false assumptions maybe pervasive. Organisational culture has been identified as both a major obstacle and an empowering factor in knowledge management. Research has focused mainly on cultural barriers to knowledge management and aspects of the cultural environment that nurture it (Chang and Lin 2015; Holste and Fields 2010; Li et al. 2013). However, it is also the case that knowledge management can have a great impact on, rather being influenced by, organisational culture.

One of the biggest influences on both organisational culture and knowledge management is the introduction of KMS, most notably in the form of what have become known as enterprise systems (Hsu and Sabherwal 2012). This chapter outlines how such knowledge management initiatives can be used to capture, integrate, monitor, report and control organisational processes and performance information (Mabert et al. 2003). Increasingly, enterprise systems are the pre-eminent mode for implementation of knowledge management. We demonstrate how people respond to such systems and the impact of knowledge management on organisational culture through the interactions between people and technologies (Al-Mashari et al. 2003; Rai

2011; Suppiah 2011). In exploring this relationship, we suggest that organisational culture is not the only determinant of the success of knowledge management but that knowledge management can affect organisational culture.

Organisational Culture and Knowledge-Sharing

Something that is quite often missing from formalised KMS is the ability to deal with the important facet of knowledge that is tacit. A large part of the group culture of an organisation is in its willingness to share knowledge (Suppiah 2011; Titi Amayah 2013). Without a clear understanding of the underpinning cultural preconditions of knowledge-sharing, organisations will not be ready to accept, adopt and utilise the processes and practices embodied in knowledge management (Fullwood et al. 2013; Gold et al. 2001; Walczak and Zwart 2003). Organisations need to be able to identify, assess and nurture the cultural prerequisites that are necessary for knowledge-sharing to flourish (Davenport et al. 1998; Junnakar and Brown 1997) in order to implement knowledge management effectively. While there has been extensive investigation of the determinants of successful knowledge management implementation, less work has been undertaken to understand the cultural antecedents and implications of management use, and worker perceptions of knowledge management for a positive organisational culture which nurtures knowledge-sharing (Massey et al. 2002). In the same frame, to understand the relationship between knowledge management and organisational culture, models and instruments are needed to evaluate and implement an organisation's capability to operationalise practices that engender knowledge-sharing (Kim et al. 2003). Being able to create the organisational cultural conditions that facilitate the generation, sharing and application of knowledge is key to the success of knowledge management (Collison and Parcell 2001; DeLong and Fahey 2000; Orlikowski 1993). However, defining this set of appropriate organisational conditions is complicated by the fact that implementation of knowledge management is context dependent (Kim et al. 2012; Nordin et al. 2009) and, indeed, it has been suggested that many attempts to develop a suitable organisational culture for knowledge management are doomed before they begin (Gold et al. 2001) because of a lack of understanding of the cultural conditions that are necessary for effective knowledge-sharing. Early work towards understanding the development of organisational culture for effective knowledge management through knowledge-sharing (Holsapple and Joshi 2000; Holt et al. 2004; Massey et al. 2002; Singh et al. 2003), along with an alternative approach based on the Theory of Reasoned Action (Fishbein and

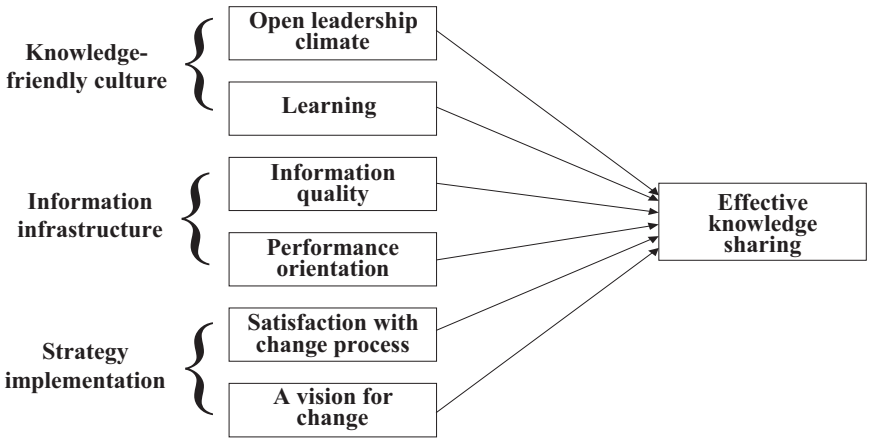

Fig. 6.1 Cultural preconditions for effective knowledge-sharing

Ajzen 1975), examines the determinants of individual knowledge-sharing behaviour and consolidates it into a framework of organisational culture that facilitates knowledge management. It acknowledges the incorporation of organisational culture and social conditions that influence knowledge-sharing attitudes and behaviours (Taylor 2003; Taylor and Wright 2004). This willingness has been shown to depend on leadership climate, organisational learning, information quality, performance orientation, the acceptability of the change process and change readiness (Taylor and Wright 2004; Wright and Taylor 2003; Wright 2007). The elements of an organisation that lead to a culture of knowledge-sharing are presented in Fig. 6.1 (Wright 2007).

Technology and Culture

The social shaping of technology provides a theoretical framework to understand the interaction between the cultural and technological dimensions of the KMS and the impact that they had on Authority Alpha. This emerged from critique of technological determinism and opposes it by arguing that technology does not develop because of an innate human technical logic; rather, it does so because of conscious and unconscious choices made by a person or people about technology that shape the direction of its conceptualisation, invention, design, development, implementation and utilisation. It is argued that technology does not determine human nature but that human actions and interactions shape how technology is conceptualised, invented, designed, developed, implemented and utilised (Bijker 1987; Pinch and Bijker 1987; Williams and Edge 1996). There are numerous social elements

(cultural, economic, organisational and political) that influence the content of technology and its implications for society. When the choices that people make are considered in the context of these different social factors, possible routes emerge that lead to different potential outcomes. These different outcomes could in turn have different implications for society, particular social groups or an organisation's cultural context. Mackay and Gillespie (1992) claim that the appropriation of technology does not imply that people are malleable beings that subject themselves to deterministic forces of technology; rather, they are active, creative and expressive beings that can reject technologies, redefine their purpose and customise or attribute symbolic meanings to them. In some instances, however, designers can develop closed technologies, preventing them from being used in unintended ways.

The influence of the KMS is best understood through appreciation of the adopting organisation's cultural and technological context prior to and during its implementation. This allows us to identify the changes resulting from the KMS and whether it was the technology, the cultural context or a combination of both that changed organisational behaviour. In our case study of Authority Alpha, prior to the introduction of the KMS, the information systems allowed for the processing of transactions but could not generate workforce intelligence. Monitoring of the workforce depended largely on the management styles in each department and did not utilise information technology. Managers did not gather workforce intelligence because the organisation was not target driven: Disciplinary measures were a last resort, the performance management of targets and deadlines was not a priority, and surveillance of the workforce was considered unnecessary. These artefacts espoused values and assumptions that were the foundations of the organisational culture prior to the introduction of the KMS. When Authority Alpha's strategy changed to focus on efficiency, the organisation responded by setting four objectives for an improved information system: improved financial visibility and control; flexible, accurate management reporting; support in delivery strategy; and integrated, transparent process that better supports public needs.

Knowledge Management Systems and Performance Management

Knowledge management has been highlighted as important in the provision of reliable information for performance management (Massingham and Massingham 2014; Taticchi et al. 2010; Taylor and Wright 2006; Titi Amayah

2013). This has been noted as especially important when an organisation is developing a culture that embraces international collaboration (Ringel-Bickelmaier and Ringel 2010). Authority Alpha had been unable to generate workforce intelligence, but this changed in 2004 with the introduction of the KMS. The KMS utilised individual usernames and passwords to log all account entries and thus facilitated direct and continuous visibility of each worker's performance, supporting managers in making workforce-related decisions. The KMS not only improved Authority Alpha's efficiencies but also supported the introduction of targets and deadlines concerned with improving workers' performance. Whenever a front-office worker made an entry into the system it recorded their identity, time of entry and any notes regarding individual enquiries. This provided a record for managers to make real-time observations of workers. With the introduction of the KMS, front-office workers were given targets and deadlines pertaining to how many enquiries they should deal with each day and how long it should take them to deal with different types of enquiry. They were allowed nine minutes to deal with a local taxation enquiry, four minutes for a pest control enquiry and ten minutes for a tourism enquiry. Back-office workers were given targets and deadlines pertaining to how many transactions they should deal with and whether these transactions conformed to the expected standards. Managers observed data about all workers' activities, regardless of whether they were under suspicion of failing to achieve their targets and deadlines; in doing so, they aimed to improve performance by ensuring that all workers knew that they were subjected to surveillance. This knowledge meant that workers assumed responsibility for the constraints of power (Foucault 1977), thus allowing managers to observe workers' aptitudes and determine how long it took them to complete specified tasks.

Workforce Intelligence

Several studies have found that information technologies that automatically generate workforce intelligence can render scenarios of observation and control (Bain and Taylor 2000; Kayas et al. 2008; Ngai et al. 2008; Zuboff 1988). The decision by management in Authority Alpha to introduce KMS therefore changed the technological infrastructure, as its previous information technologies were unable to generate workforce intelligence. The system now had a feature that automatically generated workforce intelligence. It was an artefact socially constructed by those people that developed the technology. They could have designed the system so that it would not automatically generate

workforce intelligence or they could have specified it as an optional function. This indicates that it was the designers' conscious and unconscious choices and actions that shaped the development of the technology underpinning the KMS so that it would automatically act as a surveillance mechanism.

It could be argued that the technology determined that workforce intelligence would be generated, as the authority did not have a choice to enact this function. However, the KMS was introduced precisely because it automatically generated workforce intelligence. This claim is supported by the authority's information objectives, which highlight management's desire to improve performance through the visibility of information-generating capabilities. This suggests that it was the cultural context of Authority Alpha that influenced the decision to implement a KMS because it was understood that it would be used to render workforce surveillance. Moreover, the KMS was configured to specify appropriate lengths of response to categories of enquiries. This configuration was a management decision, as they had to consciously specify how long to allocate for each type of enquiry. Thus, this was an optional function used to generate workforce intelligence. The information system objectives indicate that management decided, before the KMS was purchased, that it would be used as a mechanism to generate workforce intelligence. Its utilisation was therefore appropriated by Authority Alpha's cultural context (Mackay and Gillespie 1992): it was management choices and actions that shaped the outcome of the KMS so it would be used as a surveillance mechanism. If management decided not to use it as a surveillance mechanism, it would have altered the trajectory of the KMS to yield a different outcome (Williams and Edge 1996).

Observation, Targets and Deadlines

Managers in Authority Alpha used two methods to observe workforce intelligence. First, they used a function built into the KMS, which produced a management report detailing who made each entry, when it was made, if there were errors, what type of enquiry it was, how long it took to complete the entry and how many entries were completed within a specified period. Second, management used a drill-down function built into the KMS, which accessed the same information as the management report.

The management report and drill-down were both features integral to the KMS. This means that it was the designers' choice to provide any adopting organisation with the ability to observe workforce intelligence. From a deterministic perspective, it could be argued that management's use of these observational functions was influenced by the KMS itself, as they was not a concern prior to its

operationalisation. However, management indicated in the information system's objectives that they wanted to observe workers so as to improve performance. Though, prior to the system, there had been no surveillance, it was clearly a strategic objective. Management's plan to observe workers' performance manifested when the system's technological infrastructure became operational. Therefore, it was the decisions and actions taken by management that resulted in workplace surveillance. Management did not have to observe the intelligence once it was generated, but they decided that it would support them achieving their knowledge management objectives. This reinforces the view of the social shaping of technology concept, as it was management's choice to observe the intelligence and it was not driven by the technology itself (Williams and Edge 1996).

The analysis of the interaction between the KMS and cultural context of the authority suggests that they were both needed to render workforce observations. Though the KMS automatically generated workforce intelligence, it was management's decision to use it. This indicates that it was the cultural context that appropriated the KMS to facilitate observation. It could be that it was the KMS that determined that workforce intelligence would be used to implement targets and control. However, this was not the case in Authority Alpha, as management stated in their information system objectives that they wanted to utilise a technological infrastructure-generated observable workforce intelligence.

The Cultural Impact of a Knowledge Management System

Perhaps the biggest change in Authority Alpha that was made possible through the technological infrastructure of the KMS was its ability continuously to generate workforce intelligence and identify those not conforming to targets and deadlines. Thus, the KMS transcended the physical arrangement of space and time by generating and storing workforce intelligence about workers located at any point within the authority. It recorded and displayed performance information to yield universal transparency. This networked arrangement created a spatial and temporal surveillance system that analysed performance information in real time (Marx 1985).

When a worker received an enquiry, they often found themselves clock-watching to make sure they did not exceed the deadline for call times. The time spent on each call became the key parameter that influenced workers, rather the effectiveness of providing information or solving problems.

If workers did not achieve their targets, management controlled their behaviour through disciplinary punishments in an attempt to increase their

output. The punishments came in three forms. First, an increase in the frequency of performance reviews, so managers could stress the importance of achieving the targets. Second, workers were sent on training courses to help them improve. Third, workers were made redundant. The performance reviews, training courses and the threat of redundancy were a means to apply corrective punishments to control workers' behaviour. Workers were aware that if they did not achieve their targets, they would face these punishments.

Our case study investigated the use of a KMS as a surveillance mechanism in a public authority and it has extended the debate in the organisational literature about how KMS support the rendering of surveillance.

By analysing the changes that occurred as a result of the implementation of a KMS, the case study enabled an understanding of how surveillance was rendered. It suggests that the information system objectives and the strategic implementation of the KMS facilitated this surveillance to facilitate a transparent control system. The control system used workforce intelligence generated by the KMS, which was then compared with performance targets to determine whether they were achieved. The control system, therefore, provided managers with the ability to monitor workers' performance and, furthermore, hold them accountable should they fail to achieve their targets. Though previous research has investigated the role of technology and surveillance in control systems, our study went further in considering how targets were used in conjunction with the KMS and performance targets.

Previous research indicates that there is an interaction that occurs between the adoption of an organisation's knowledge management strategy and the cultural context in which the associated surveillance takes place. There is, however, a lack of understanding about the interaction of the KMS and the adopting organisation's social context. Our analysis of the interaction between the authority's KMS and the cultural context implies that a combination and interaction of both was needed to influence the rendering of surveillance. Though the KMS automatically generated workforce intelligence, it was management's decision to determine how it was used: the choices and actions taken by management during the purchasing, implementation and utilisation of the KMS significantly influenced the outcome on performance management.

Knowledge Management and the Enactment of Power

There is an argument that power is most effective in changing behaviour to conform if it is both visible and unverifiable (Foucault 1977). In the case of Authority Alpha's KMS, the power was visible as workers could see their performance

information on their computer or other device. The power was also unverifiable because workers knew intelligence about their performance was continuously generated, but they did not know when it was inspected: managers did not continuously observe intelligence even though it was continuously generated. Because workers did not know when they were observed, they assumed they were constantly watched. Therefore, this set-up affected their behaviour as it heightened their awareness of their targets and deadlines.

The KMS undoubtedly altered worker behaviour as this sort of self-regulation did not occur prior to its operationalisation. It had created the automatic functioning of power described by Foucault (1977) as workers had inscribed in themselves a power relationship which saw them become the principle of their own Subjection.

Knowledge Management Systems as Control

Using a Foucauldian lens of power, Sia et al. (2002) explore the use of an enterprise resource planning system as an ambivalent technology of power, to understand whether it can be used as a mechanism to empower or control people within an organisation. They found that control emerged because of the information system, indicating that the technology had a deterministic impact on their case organisation. Furthermore, despite additional organisational control being unnecessary prior to its implementation, the controlling features of the information system were leveraged, while its empowering features were suppressed. By drawing on structuration theory, the authors suggest that this was because the organisation chose to appropriate aspects of the technology which suited its existing arrangements. Their research concludes that the social context in which the information system is embedded leads to self-regulation. Though Sia et al. describe the nature of the organisation's social context before and after implementation as one of institutional conservatism, their research does not elaborate the interaction between the information system and the adopting organisation's cultural context, or how it influenced the rendering of self-regulation.

Elmes et al. (2005) also adopted a Foucauldian lens to investigate changes in organisational control that emerged after the implementation of an information system, identifying two contradictory theoretical concepts. First, empowerment, which refers to the information visibility provided by the

information system's database. It empowers workers to be more efficient and effective but also makes them more visible to those exercising control. Second, reflective conformity, which describes the increased discipline achieved because of the information system's embedded rules and procedures for organisational processes, while also requiring workers to be reflective in order to achieve any benefits from the information system. Though Elmes et al. acknowledge that the introduction of the new information system fostered a disciplinary culture which encouraged workers to follow and value the technology's processes, they do not elaborate on the interaction between the organisation's information system and the cultural context, or the influence that they had on self-regulation.

Sia et al. (2002) and Elmes et al. (2005) suggest that information systems can support the rendering of increased organisational control. Conversely, Dechow and Mouritsen (2005) argue whether information systems can support the visibility of power. They suggest two reasons for this. First, integration supported by information systems may yield more accurate and available information but does not necessarily render workforce visibility because it does not have a place to store details about all management control problems. Second, information systems may result in less integration and, subsequently, less accurate and available information, which means that workforce visibility and, invariably, the visibility of power is reduced.

The interaction between the KMS and Authority Alpha's social context is representative of a contemporary knowledge management debate. It is suggested that KMS can facilitate surveillance and provide control systems, so that the behaviour desired by management results from interaction with the system itself, rather than from a collective desire and internalisation of the performance criteria and targets. Kayas et al. (2008) explored the issue of how KMS, in the form of an enterprise resource management system, can support the application of power. They draw on technological determinism and the social shaping of technology to understand how an organisation's information systems and cultural context interact. Their analysis of the empirical data suggests that the information system provided the organisation with a technological infrastructure from which power could be deployed, thus impacting an organisational culture, as it generates workforce intelligence. However, in this instance, management used the information system to overtly access workforce intelligence, which diminished its power. This occurred because the organisation's cultural context prior to the implementation of the information system did not emphasise workforce surveillance. This cultural characteristic

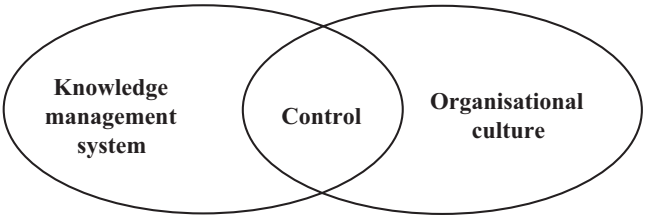

Fig. 6.2 Knowledge management and organisational culture: the creation of control

was embedded in the case organisation's cultural context, which then influenced management's decision not to deploy covert surveillance. Kayas et al. conclude that the information system was shaped and influenced by the sociocultural context of the organisation, rather than the information system determining its social context. Figure 6.2 illustrates how a knowledge management system that supported the generation of workforce intelligence was needed, in addition to a cultural context that emphasised surveillance in order to render control.

Knowledge Management and Organisational Culture: Some Final Thoughts

Most research has investigated the aspects of organisational culture and climate that are necessary to implement a KMS (Janz and Prasarnphanich 2003). There is, however, much evidence that the converse can be true—that KMS can in fact have a significant impact on culture (Ismail and Alawi 2007; Park 2004).

Technology has impacted on workforce surveillance and it has been argued that there is a dynamic relationship between surveillance technologies and social control (Kim 2004). The data storage capability of technology has enabled increased volumes of information to be captured and so has altered the nature of surveillance (Marx 1985). Technology has extended organisational memories across time and space because their networked functionality enables data to be stored to provide management with the ability to analyse transactions and events that have taken place, are taking place or may take place. Zuboff (1988) investigates the surveillance power of information technology in the workplace, finding that information systems that record, translate and display human behaviour provide the computerised version of universal transparency. These systems, which do not depend

on the physical arrangement of buildings, record-keeping or the presence of an observer, can become information panopticons: information systems capable of automatically and continuously recording data required for analysis.

Culture has many similarities to attitudes. Like attitudes, culture is enduring: Once established it is difficult to change; it is easier to influence a new culture of attitude than it is to change one that has become ingrained. There is some debate concerning the relationship between attitudes/culture and behaviour. It is tempting to think that changing attitudes will lead to behavioural changes, that in turn will persuade people that the new way is more attractive than enforcing change. Alternatively, it is quicker to enforce changed behaviour and if this becomes embedded in routines (artefacts), it quickly influences attitudes and cultures. Consider social interventions such as those surrounding wearing protective headgear on motorbikes, using seat belts in cars, drink-driving, smoking in public places and using mobile phones while driving. These have all been the subject of 'short sharp shock' interventions in the form of legislation which serves to enforce new behaviours and impose sanctions on those who do not conform. Though few would now argue with the public benefit of such behaviours, each of these situations was initially resisted with arguments that went as far as claiming the infringement of human rights. So, in these cases, attitudes quickly followed new, if enforced, behaviours. This is true also of the cultural changes that arise from new routines and behaviours engendered by KMS. Indeed, there is evidence of positive levels of job satisfaction and organisational/job commitment of those who work in (even the most restrictive) knowledge management surveillance regimes (Rose and Wright 2005).

From our consideration of knowledge management and organisational culture, we propose ten key considerations for management teams seeking to implement and leverage KMS (Fig. 6.3).

In conclusion, KMS are often, at their best, welcomed by management as a way of leveraging information to improve performance through a better understanding of the organisation's efficiency. Such systems may highlight that costly changes or investments in plant and physical infrastructure would be beneficial, but this may lead to downtime and capital expenditure impacting on the balance sheet. So, alternatively, and at worst, knowledge management can be seen as a way to monitor and control the workforce through data-driven sanctions and rewards that are more concerned with a one-straightjacket-fits-all approach to efficiency rather that effectiveness.

1.	Knowledge management can have unanticipated consequences for organisational culture
2.	An organisation must include consideration of the important elements of knowledge sharing within its knowledge management strategy
3.	The antecedents to effective knowledge sharing should be carefully planned in any knowledge management initiative
4.	The cultural impact of the surveillance rendered as an outcome of implementing a knowledge management system should not be underestimated
5.	The sociotechnical relationship should be considered when management implant knowledge management systems
6.	Managers need to understand and account for the impact on power relationships of the implementation of a knowledge management system
7.	The artefacts, espoused values, and assumptions should be integrated into any cultural change associated with knowledge management
8.	Rewards and sanctions aligned to knowledge management should be considered to attain desired cultural change
9.	Performance management outcomes need to be balanced with the impact of knowledge management systems on organisational culture
10.	Behavioural and attitudinal responses to knowledge management systems should be monitored throughout the implementation of a knowledge management system

Fig. 6.3 Ten considerations for a knowledge management system

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