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Organisational change during knowledge management implementation

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A research project submitted to the Gordon Institute of Business Science,
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degree of Master of Business Administration.

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Abstract

Business and academic communities have indicated that organisations have the ability to maintain a long-term competitive advantage through leveraging knowledge within the organisation. This is through the implementation of a knowledge management programme. During implementation of the programme, employees' commitment and participation is crucial in ensuring successful execution of the knowledge management programme. Change management has been identified as one of the strategic inputs which enable organisational commitment towards this programme.

This study aimed at establishing the change strategies that organisations undertake when implementing knowledge management, as well as determining the relevance of Kotter's eight steps of change during knowledge management implementation. An exploratory design, using a qualitative research methodology approach, was utilised. Twelve organisations formed part of the sample and a total of 13 semi-structured interviews were conducted. The data that was collected underwent content analysis and was thereafter aligned to the change management models.

The findings from this research indicated that Beer and Nohria's proposed change strategies, specifically Theory E&O (combination) is the most dominant strategy overall when implementing knowledge management.

Kotter's eight steps revealed that all steps are relevant when implementing knowledge management. It was concluded that as more of the steps are included and executed during implementation, the success of the knowledge management initiative increases.

Keywords

Knowledge management, knowledge transfer, change management, change strategies

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.



Arvin Lankesar

10/11/2014

Date

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Chapter 1: Introduction to research problem

1.1 Title

“Organisational change during knowledge management implementation”

1.1 Research problem

Information and knowledge management tools and processes are essential components within every organisation. These tools and processes enable organisations to acquire and store information which they have gathered from their work teams; this enables sharing, learning and collaboration.

There are two dimensions of knowledge: tacit knowledge and explicit knowledge. Tacit knowledge is knowledge that resides in the human mind and is difficult to articulate. Explicit knowledge is knowledge that is easily codified for reuse amongst organisational members. Knowledge management is thus a process whereby organisations attempt to extract explicit and tacit knowledge from their workforce to enable new knowledge to be created and transferred within the organisation.

Knowledge management is seen as an element of competitive advantage in the business environment. Organisations and business communities are under pressure to ensure optimal utilisation of knowledge; it is, therefore, important for them to develop effective knowledge management initiatives (Bishop, Bouchlaghem, Glass, & Matsumoto, 2008).

Effective implementation of knowledge management initiatives enables an organisation to respond efficiently towards market changes and reduces the amount of redundant information available to the organisation. Knowledge has become one of the most critical driving forces for business success (Kuan Yew Wong, 2005).

According to Ajmal, Helo, and Kekäle, (2010), organisations implement knowledge management for various reasons, with a view to:

- streamlining and improving current business processes;
- encouraging financial savings within the organisation;
- improving organisational revenue;
- enhancing user acceptance; and
- improving organisational competitiveness.

Knowledge management has been advocated as one of the key sources of competitive advantage and innovation in organisations (Arntzen Bechina & Ndlela, 2009). Business and academic communities concur that by leveraging knowledge within the organisation, the organisation will be able to maintain and sustain a long-term competitive advantage (Bhatt, 2001).

Knowledge management implementation focuses on two main areas, in particular: the hardware (information technology [IT] systems) and the socio-technical aspect (organisational culture and behaviour). “IT systems” focuses on portals and shared drives, amongst others, which are implemented within the organisations in the “hope” that people use these systems to create and transfer knowledge; the socio-technical aspect focuses on the people aspect of implementation.

Bishop et al. (2008) have alluded to the idea that organisations focus primarily on IT for knowledge management; however, they should also take cognisance of the human aspect during implementation. Organisations have implemented sophisticated technology for knowledge capturing; however, they have not been able to achieve a competitive advantage over one another (Damodaran & Olphert, 2000). Employees’ commitment and participation towards knowledge management initiatives is imperative for successful knowledge management implementation (Rusly, Corner & Sun, 2011).

Fehér (2004) has indicated that when committing to any kind of knowledge management approach, organisations have to face changes when introducing and developing their knowledge management practices. These knowledge management practices require changes of routines, behaviour, organisational processes and structures, in order to ensure successful implementation.

This view has also been supported by Rusly, Corner and Sun (2011), who have indicated that during the process of implementing new knowledge, individuals and their organisations' belief systems undergo changes; that require shifts in individual thinking and behaviour.

It can be advocated that the implementation of any knowledge management system or practice will necessitate a change management process in order to facilitate successful implementation. This change process will enable organisations to obtain the employees' commitment towards the knowledge management initiative and potentially ensure success in obtaining its objectives.

1.2 Research objectives

A gap was identified through the literature review which was conducted on knowledge management. The identified gap was the change management initiatives which organisations undergo in order to implement knowledge management.

The objectives of this research are to:

1. align the change initiatives which organisations undertake with Kotter's eight-step change framework;
2. establish the relevance of Kotter's eight-step framework for successful knowledge management implementation; and
3. Determine why organisations undertake a knowledge management implementation programme, using Beer and Nohria's change strategy.

These change strategies will be used to conclude whether organisations implement knowledge management to:

- improve their financial capability;
- improve organisational capability (people-centred); or
- improve both economic and organisational capability.

1.3 Research Aim

The aim of this research will be to understand the change management initiatives that organisations undertake when implementing knowledge management. The findings which have been obtained will be mapped out against Kotter's eight-step change framework. This will determine the relevance of this model when implementing knowledge management.

Beer and Nohria's (2000) strategies for change explore the objective of organisations which are implementing change along six dimensions; these are: goals, leadership, process, focus, reward systems and use of consultants. This framework is utilised to determine the reasoning for implementing change, from a knowledge management perspective. The aim is to understand which strategy for change is more common along these six dimensions, which will provide insights into the rationale for organisations implementing knowledge management.

Kotter's change framework as well as Beer and Nohria's change strategies will facilitate an understanding of the change management framework that organisations follow when implementing knowledge management.

1.4 Conclusion

The benefits of successful knowledge management implementation within organisations have been presented. Information technology is the primary focus of organisations that are tackling the implementation of knowledge management. It was determined that there is lack of a people-related aspects (socio-technical aspects) when implementing knowledge management. This research focuses on the socio-technical aspect with regard to the change management practices that organisations undertake during implementation.

The structure of this dissertation is as follows:

- **Chapter 1:** This chapter provided the research problem, which identified the gap that exists in the field. The research objectives and aims were presented.

- **Chapter 2:** Literature review – This chapter explores the plethora of literature on both knowledge management and change management. The outcome of this chapter is to further iterate the gap on this subject and to align knowledge management and change management.
- **Chapter 3:** Research questions – These questions will form the basis of the exploratory research, which aims to close the gap that is presented in the literature.
- **Chapter 4:** Research methodology – An explanation of the research methodology will be provided.
- **Chapter 5:** Results – This chapter presents the sample of results that have been obtained.
- **Chapter 6:** Discussion of results – This chapter focuses on the findings displayed in Chapter 5. The results will be discussed, with reference to the preceding chapters, to present the insight gained and answer the research questions presented in Chapter 3.
- **Chapter 7:** Conclusion – This chapter highlights the main findings of this research, provides recommendations to stakeholders and also indicates future research opportunities.

Chapter 2: Literature Review

Knowledge management can be defined as “a systematically and organizationally specified process of sharing, transferring, creating, using and saving the knowledge of employees to enhance the organisational performance” (Essawi & Tilchin, 2013, p. 467). This definition provides a succinct overview, which encapsulates the implementation of knowledge management through a series of processes and, ultimately, improves organisational performance. The goal of knowledge management is for an organisation to become aware of the knowledge that it has, both individually and collectively, and to ensure that this knowledge is shaped such that it is utilised effectively and efficiently (Alavi, Kayworth, & Leidner, 2006). Many organisations are exploring this field in order to improve and sustain their competitiveness (Kuan Yew Wong, 2005).

The efficient utilisation of intellectual resources within organisations can provide positive spin-offs, such as customer service improvement, cost reduction, improved decision making and successful transfer of best practices (Alavi et al., 2006). Any organisation that deals with a changing environment must create and process information efficiently (Nonaka, 1994). The literature review presented in this section will address the theories of knowledge management and change management, with a focus on Kotter’s eight-step change framework and Beer and Nohria’s change strategy.

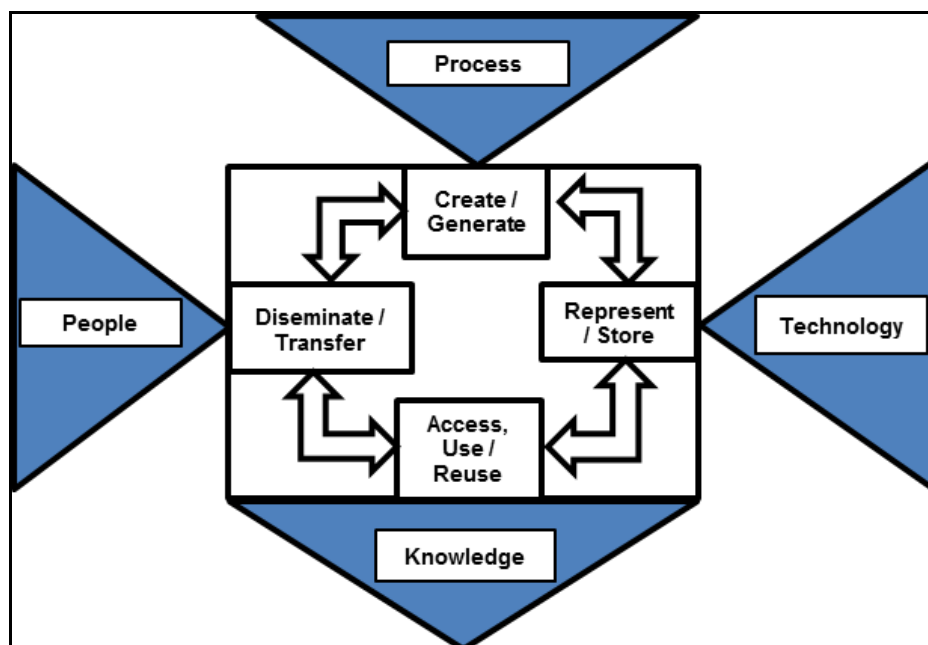
2.1 Knowledge Management

Knowledge management has been advocated as one of the key areas which businesses can leverage in order to attain competitive advantage. Organisations have realised the importance of knowledge management and have thus implemented knowledge management systems, with the aim of capturing and using the knowledge that is available to them in their business environment. These systems enable an organisation to acquire and store information obtained from its work teams, using people, processes and technology. According to Dunham and Burt (2011), effective knowledge management involves the creation, capture, storage and transfer of knowledge by organisational members.

2.1.1 Knowledge management diamond model

The knowledge management diamond model was introduced by Wickramasinghe (2006). Figure 1 illustrates the model, in which we see the interaction of people, process and technology elements in the four dimensions of knowledge management, which are: create/generate, store/represent, access/use/reuse and disseminate/transfer. This model provides a holistic view, indicating how the interaction of the various facets in knowledge management are succinctly brought together to create knowledge.

Figure 1: Knowledge management diamond model



- **Create/generate:** Knowledge creation is the process of combining knowledge from different sources, whether internal or external to the organisation, which results in new knowledge (Alavi & Leidner, 2001; Bouthillier & Shearer, 2002).
- **Store/represent:** Knowledge storage and representation involve storing and structuring of information to enable employees to have a better understanding of the knowledge. Knowledge storage is used to assist and support organisational memory and enable individuals to access available knowledge.

Knowledge storage provides a mechanism for coding and indexing knowledge which can be used at a later stage in the organisation (Mansour & Alhawari, 2009). Radding (1998) has indicated that knowledge must be captured and stored in a place where it can be made available to others.

- **Disseminate/transfer:** Knowledge that has been created and stored can be transferred to others via information systems or through personal interactions (Radding, 1998). It has also been indicated that knowledge transfer is a process whereby the organisation exploits and applies existing knowledge (Kumar and Ganesh, 2009). Knowledge transfer has been advocated as the interaction between a source and a receiver, and a vehicle whereby knowledge is transferred between the two (Jasimuddin, Connell, & Klein, 2012).
- **Assess/use/reuse:** Within the overall model for knowledge management, this process is described as the process whereby acquired knowledge is utilised towards a particular task within an organisation. This knowledge may be applied in three different forms: instrumental use or direct action; conceptual use or indirect action – influencing others; and symbolic use – using knowledge to justify other actions (Parent, MacDonald, & Goulet, 2014).

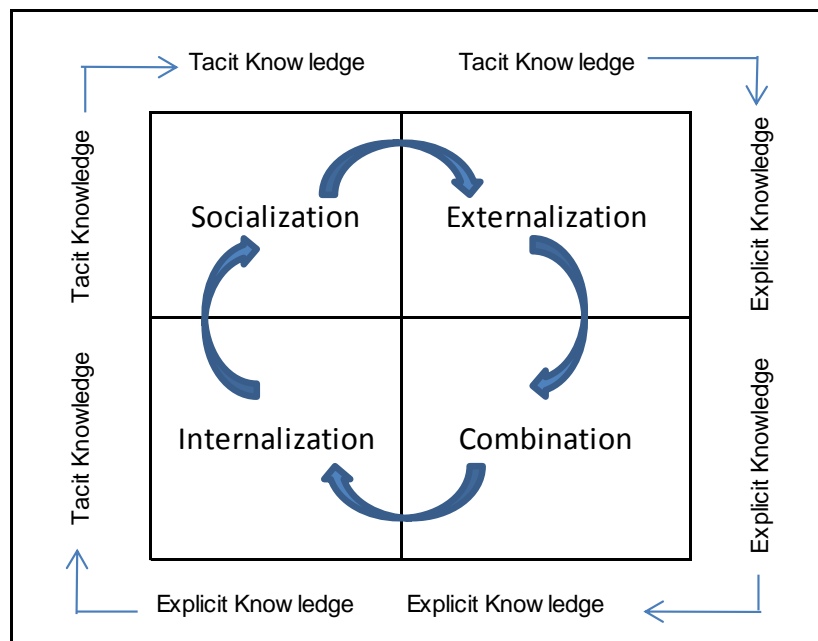
2.1.2 Knowledge Creation

The two types of knowledge which are inherent in humans are: tacit knowledge and implicit knowledge (Nonaka, 1994). Tacit knowledge contains cognitive and technical elements. The cognitive element is structured around “mental models” whereby humans form working models of the world, and the technical aspect focuses on “know-hows”, crafts and skills that apply to specific contexts. Tacit knowledge is thereby knowledge that is deeply rooted in actions, commitment and involvement in a specific context. Tacit knowledge dwells in the human mind and is difficult to articulate and codify.

In contrast, knowledge which is referred to as “explicit” is knowledge which is discrete or digital, and which can be articulated and transferred in formal and systematic language. Nonaka and Von Krogh (2009, p. 635) and Nonaka (1994, p. 17) refer to the knowledge creation of an organisation as a process that “organizationally amplifies the knowledge created by individuals and crystalizes it as part of the knowledge network of the organizations”.

The SECI model, introduced by Nonaka and Takeuchi (1995), explores knowledge creation through a spiralling process of interaction between tacit and explicit knowledge. The SECI model is one of the oldest knowledge management models and is presented in this literature review, as this model is the most cited model in explaining the process of knowledge creation. This model represents the process whereby existing knowledge can be used to assist in the creation of new knowledge. Figure 2 below is a representation of the SECI model:

Figure 2: SECI model



The SECI model shows the four dimensions through which knowledge is created. These dimensions are tacit to tacit, tacit to explicit, explicit to explicit and explicit to tacit. Each of the dimensions will be discussed briefly below:

- **Tacit to tacit:** This dimension of knowledge is shared through a process of socialisation. Individuals exchange knowledge through joint activities as opposed to written and verbal instructions. This process of knowledge creation is usually shared through experiences and interaction with other people within and/or beyond the organisational boundary (Chou, 2005).
- **Tacit to explicit:** This dimension of knowledge is shared through a process of externalisation. This process inhibits the translation of tacit knowledge into a comprehensible format which can be understood by others. This knowledge then becomes crystalized, thus allowing it to be shared by others, and forms the basis of new knowledge creation (Chou, 2005).
- **Explicit to explicit:** This dimension is referred to as “combination”. Combination occurs when explicit knowledge is converted into a more complex set of explicit knowledge.
- **Explicit to tacit:** This dimension is referred to as “internalisation”. Internalisation occurs when explicit knowledge is converted into tacit knowledge. This process requires the individual to pinpoint knowledge within the organisation’s knowledge which is relevant for one’s self.

The SECI model presented above introduces context to the subject of knowledge management and provides a framework for evaluating the knowledge creation process. It summarises how knowledge is created and shared among people, which corresponds with the definition of knowledge management which is presented at the beginning of this chapter.

2.1.3 Knowledge Storage

Knowledge that is created must be stored in a facility where organisational members can easily access the information and also contribute to the knowledge that is available. This will enable easy access to information and improve the organisational memory.

Knowledge which is created or captured must be stored in a facility whereby it can be managed and made accessible to organisational members in a professional and efficient manner (Pillania, 2008; Radding, 1998). This will enable organisational members to use the existing knowledge that is present and contribute to the creation of new knowledge. According to Alavi and Leidner (2001), the storage, organisation and retrieval of organisational knowledge is called “organisational memory”, which is comprised of knowledge residing in electronic databases; codified human knowledge stored in expert systems; documented organisational processes and procedures and tacit knowledge, acquired by individuals. Tapping into the organisational memory gives employees access to pertinent information, which will enable them to assist the organisation in achieving its intended objectives.

Whilst organisations create knowledge and learn, they also have a tendency to forget the knowledge which they have acquired and allude to organisational memory as an integral component for effective organisational knowledge management (Chou, 2005). Knowledge storage includes the “retention, protection and maintenance of knowledge in various mediums, such as individuals, documentation, computers and technology” (Parent et al., 2014, p. 207).

Individuals are often unwilling to invest the time in adding content to their organisational knowledge repository, which is one of the key processes in retaining and storing knowledge. To overcome this hurdle, someone must be made specifically responsible for compiling, organising and planning knowledge networks and repositories (Yang, 2008). Organisations generally appoint a knowledge manager to ensure that this hurdle is overcome.

2.1.4 Knowledge transfer in organisations

The process of knowledge transfer is a key component in ensuring effective knowledge management implementation. Transferring knowledge within an organisation requires the interaction of people and processes which enable an organisation to promote sustainability.

Knowledge transfer has been defined as “identifying accessible knowledge that already exists, acquiring it and subsequently applying this knowledge to develop new ideas or enhance existing ideas to make a process/action faster, better or safer than they otherwise would have been” (Liyanage, Elhag, Ballal, & Li, 2009, p. 7). This definition of knowledge transfer indicates that the process of transfer involves understanding existing knowledge and applying it to improve processes and to create new knowledge. Guzman and Wilson (2005), Kumar and Ganesh (2009) and Liyanage et al. (2009) have also alluded to knowledge transfer as an act of communication between a source and a receiver. It has also been argued that an organisation that promotes knowledge transfer is more productive and will be able to survive longer than organisations that do not encourage this (Liyanage et al., 2009, p. 7). Knowledge transfer typically occurs across a boundary and this may be between occupational groups, organisational units or between geographic areas (Argote & Miron-Spektor, 2011).

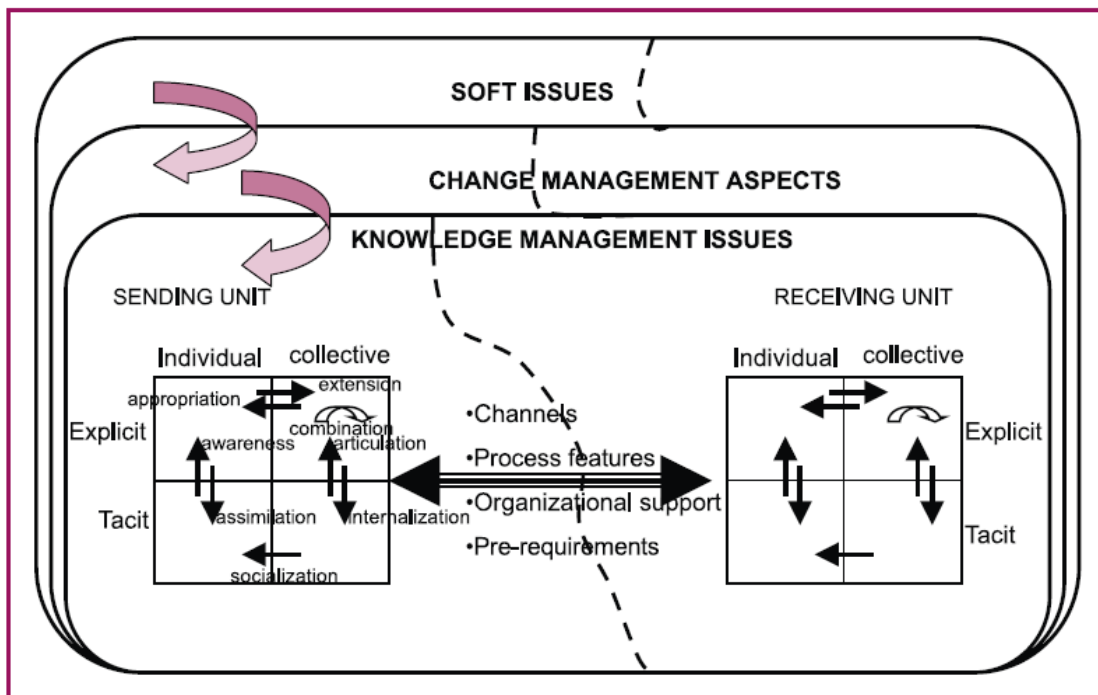
This process of knowledge transfer can be described using the knowledge conversion model (SECI model) above. The following information and communication technology (ICT) tools have been identified by Jasimuddin & Zuopeng (Justin) Zhang (2011); these assist in knowledge conversion and transfer:

- Explicit to explicit knowledge transfer incorporates the use of document management tools and knowledge portals.
- Tacit to explicit knowledge transfer incorporates the use of collaboration and communication tools.
- Explicit to tacit knowledge conversion supports the use of knowledge discovery and e-learning mechanisms.
- Tacit to tacit knowledge transfer takes place using peer to peer networks.

2.1.5 Knowledge transfer model

Research conducted by Guzman and Wilson (2005) alludes to knowledge creation and transfer in an organisation as a change process. This research closely converges with the literature on change management. Through their literature and case study they have created a knowledge transfer model, illustrated by Figure 3 below, which attempts to provide an understanding of the knowledge transfer process.

Figure 3: Organisational knowledge transfer model



The organisational knowledge transfer model provides a useful framework for understanding the context that is required for transferring knowledge within an organisation, as well as a framework that will assist in mitigating the barriers to knowledge transfer in organisations. This model focuses on three areas; specifically, soft issues, change management aspects and knowledge management issues. These will be discussed briefly below:

- **Soft issues:** The term “soft issues” refers to the underlying assumptions from a macro perspective that may influence the transfer of knowledge within the organisation. Knowledge transfer is sometimes referred to as the transfer of knowledge from a provider (sender) to a receiver (Jasimuddin et al., 2012). The soft issues represented within this process refer to the mutual understanding of the sender unit and receiver unit, which is related to the social context barriers.
- **The change management aspect:** Knowledge creation and transfer is a change process, and the change management aspects focus on the change initiatives that organisations should attempt for successful transfer of knowledge.
- **Knowledge management issues:** This part of the model focuses on the creation of individual and organisational knowledge. This process is aligned to the knowledge creation process; in other words, the SECI model introduced at the beginning of this chapter. It also focuses on the barriers that organisations undergo when transferring knowledge, which has been referred to under the section of “Barriers to knowledge transfer in organisations”, presented below.

2.1.6 Barriers to knowledge transfer in organisations

Guzman and Wilson (2005) have identified three barriers associated with the complexity of knowledge transfer in organisations. This has been structured under three dimensions, which are: social context, structural organisational factors and degree of abstraction:

- **Social context:** Knowledge transfer is based on an individual’s interpretation, behaviours and cognition. Alavi et al. (2006) have indicated that knowledge management processes are substantially influenced by the social settings in which they are embedded, and are subject to varying degrees of interpretation. For knowledge transfer to be transmitted effectively, it must be congruent with the existing social context.
- **Structural organisational factors:** These factors include conflicting goals within organisations which inhibit knowledge transfer, low trust levels that exist between sending and receiving units and human rationality and limitations.
- **Degree of abstraction:** This refers to the way in which organisational knowledge is packaged for transmission. Knowledge transfer is considered a technological issue as much as it is considered an organisational and people issue (Riege, 2005).

Riege (2005) has argued that companies attempt to adjust their organisational culture to meet their knowledge management goals and strategy instead of aligning these goals with that of the culture already present.

2.1.7 Benefits of knowledge management

Knowledge management has been advocated as one of the critical success factors in an organisation's ability to gain and sustain a competitive advantage (Cebi, Aydin, & Gozlu, 2010; Chan, Pollard, & Puriveth, 2011).

Eight benefits of knowledge management have been identified by Radding (1998):

- **Prevention of knowledge loss:** enables an organisation to retain expertise and knowledge when people retire, change jobs or when they are retrenched (Yang, 2008);
- **Improved decision making:** facilitates access to knowledge that is required for effective decision making;
- **Adaptability and flexibility:** enables employees to understand their work better and allows them to operate in cross-functional situations;
- **Competitive advantage:** enables organisations to have a better understanding of the market and identify competitive gaps and opportunities.(Bishop et al., 2008);
- **Asset development:** creates the environment in which organisations can capitalise on legal protection for intellectual property such as patents and trademarks;
- **Product enhancement:** allows the organisation to apply/embed knowledge in its product and service offerings, which can result in an increased perceived value of the product. Yang (2008) asserts that when organisations implement knowledge management, they benefit by making better organisational decisions;
- **Customer management:** the benefit of understanding a customer is that it enables an organisation to improve product offerings and quality of service (Yang, 2008); and
- **Leverages investment in human capital:** the ability to share lessons learnt, document processes and capture and transmit tacit knowledge. Organisations are better equipped in leveraging their investment in hiring and training workers.

2.1.8 The critical success factors for knowledge management implementation

Organisations throughout the world have implemented knowledge management systems. The aim of this is to capture the knowledge that is present within the organisation, to reuse it or repackage it into new knowledge. The implementation of knowledge management enables innovation, effective coordination and positive reactions towards market changes (Bishop et al., 2008). A number of studies have focused knowledge management initiatives on information technology (Bishop et al., 2008). Furthermore, they have indicated that organisations should place more emphasis on the human side of knowledge implementation.

Several studies which focus on determining the critical success factors for effective knowledge management implementation have emerged. Bishop et al. (2008) and Kuan Yew Wong (2005) have conducted research to determine the critical success factors that have been reported by various academic studies. Table 1 below illustrates these findings:

Table 1: Knowledge management critical success factors

(Kuan Yew Wong, 2005)	Bishop, Bouchlaghem, Glass, & Matsumoto (2008)
Management leadership and support	Establish top-level support
Culture	Establish a fit with the needs of individuals and the business
Information technology	Achieve a balance between people and IT
Strategy and purpose	Demonstrate and communicate benefits and successes
Measurement	
Organisational infrastructure	
Processes and activities	
Motivational aids	Determine suitability of financial and non financial rewards
Resources	Implement KM champions and a supporting team
Training and education	Understand and define knowledge management
Human Resource Management	Integrate into organisation and daily lives of staff

The identification of the critical success factors provides a basis for a change management process to enable knowledge sharing for effective knowledge management implementation (Damodaran & Olphert, 2000). The reviewed critical success factors have been aligned, demonstrating commonality between them; this is presented in Table 1 above.

Rusly, Corner, and Sun (2011) have argued that even though many organisations are investing in knowledge management, there has been an increase in its rate of failure, and, furthermore, that success is not always guaranteed through technological infrastructure investment. They further claim that the main achievement within knowledge management is employees' willingness and commitment to participate in this initiative.

Some of the critical success factors which have been presented can be linked to a change management perspective. Kotter (1995) has introduced an eight-step change management process whereby organisations can effectively manage change. Comparing some of the critical success factors with his change management process, which is presented in the next section, it can be inferred that there is a commonality between change management and the critical success factors for knowledge management implementation.

2.2 Organisational change

Change management has been defined as “the process of continually renewing an organisation’s direction, structure and capabilities to serve the ever changing needs of external and internal customers” (By 2005, p. 369). With the constant pressure from stakeholders and the changing economic environment, organisations worldwide need to modify the way in which they do things (Oakland & Tanner, 2007). Organisations are constantly faced with the need to successfully change their structure, processes and technologies in order to maintain their competitive advantage (Kwahk & Lee, 2008). According to Beer and Nohria (2000), 70% of all change management initiatives fail. This high failure rate can potentially be explained by the lack of a valid framework for the implementation and management of change (By, 2005).

2.3 Change management frameworks

Organisational change generally follows a linear, rational model whereby the focus is on controllability under strong leadership or “guiding coalition” (Graetz & Smith, 2010). This is indicative of the importance of the level of support that is required from leadership when implementing change.

A literature review was conducted by Oakland and Tanner (2007) on the themes that have emerged in current change management models. These themes are presented below:

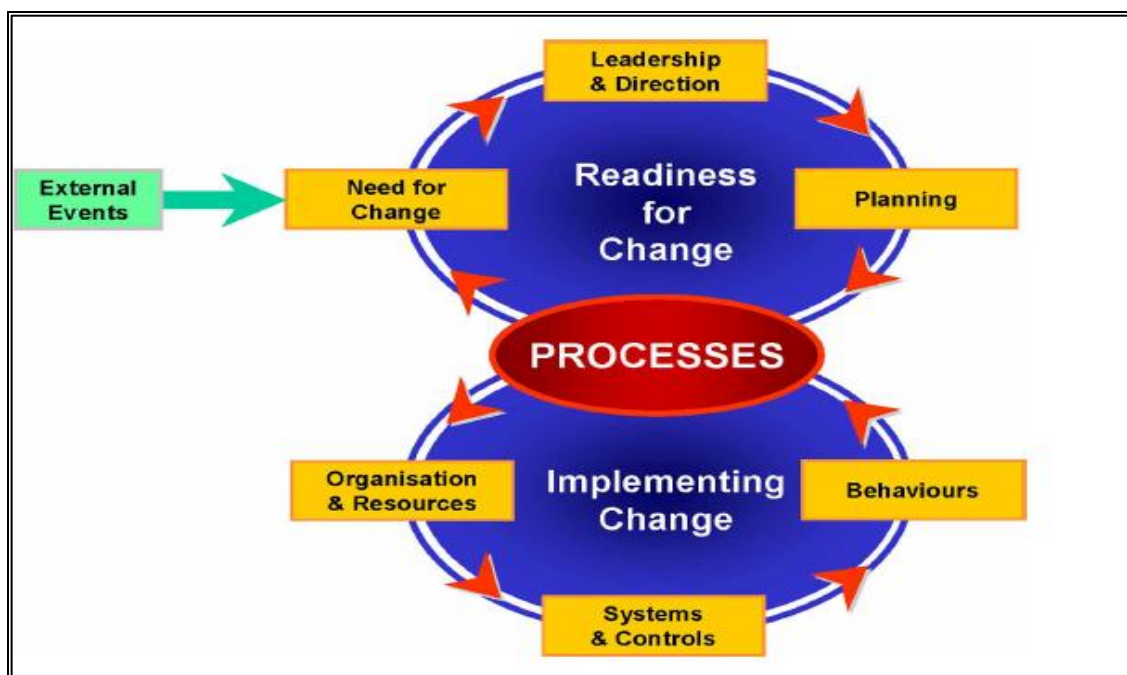
- **Leadership:** Leadership plays a key role in setting direction, inspiring change in the organisation and ensuring its implementation;
- **Identification and definition of change:** This process identifies why such change is required and defines clear success measures.

- **Managing change within the culture of the organisation:** people are the essential contributors to successful change and it is necessary to develop the culture in the organisation and ensure good communication; and
- **Learning:** organisations see consultants as important contributors to learning when implementing change.

These four themes correspond with the critical success factors for knowledge management implementation, which are presented in Table 1.

Emanating from this literature review was also an organisational change framework for successful change management implementation. Figure 4 below depicts this framework.

Figure 4: Successful organisational change management framework



This framework indicates that two processes occurs when change is introduced; specifically, readiness for change and implementing change. Within each process there are other sub-processes that contribute to its implementation.

2.3.1 Readiness for change

Organisational readiness is defined as follows: “Organisational members change commitment and change efficacy to implement organisational change” (Weiner, 2009, p. 2). It has been indicated that readiness must be created at the preparation stage to ensure employees’ acceptance of change (Rusly, Corner, & Sun 2011). One of the main reasons for the high failure rate in change management initiatives is user resistance to change. Creating readiness for change has, therefore, been proposed as a chief contributor in reducing this resistance (Kwahk & Lee, 2008).

In their model, Oakland and Tanner (2007) have indicated three sub-processes towards implementing change readiness:

- **Need for change:** When creating a belief that organisational change is required, there is a need to communicate the gap that exists between the current and desired end states in the system (Kwahk & Lee, 2008). Organisational members generally resist change initiatives unless they identify compelling reasons for them to embark on this change (Cummings & Worley, 2009). The gap between the current and desired end states should to be communicated within the organisation. This assists in creating a culture for change.
- **Leadership and direction:** Leadership and direction ensure that the need for change is articulated as an expectation of values, aims, measured objectives and targets. Oakland and Tanner (2007) indicate that leadership identifies and selects the priorities for change and that once they select the priorities they must adhere to them. These priorities are usually communicated through the organisation through storytelling. Communication is regarded as one of the critical components for change readiness, and clear articulation of change can assist employees’ understanding of change and motivate them towards becoming more receptive towards the change (Rusly et al., 2011). Kwahk & Lee (2008) suggest that a push for change from senior management is likely to bring about a positive perception of the change initiative and will encourage employees so that they are more positive about, and ready to implement change.

- **Planning:** This process initiates plans for change implementation and focuses employees' minds on the strategic objective of the change(s). The planning process entails creating a road map for the change initiative and communicating the specific activities and events that must occur in order for this transition to succeed (Cummings & Worley, 2009).

2.3.2 Implementing change

Once organisations have created and communicated readiness for change it follows that the implementation of the change initiative should be undertaken. Oakland and Tanner (2007), in their successful change management framework, describe three processes that organisations should undertake when implementing change. These processes are listed and described below:

- **Organisation and resources:** This refers to the organisational structure, roles, competencies and resources deployed within the change initiative. It has been indicated by Cummings and Worley (2009) that due to the transition that organisations undergo when implementing change, special structures are required. These structures should include people who have the power to mobilise resources to promote change and have the respect of existing leadership, and interpersonal and political skills, to guide the change process.
- **Systems and controls:** These are the performance measures and technology which support the change initiative. Performance measures are critical in ascertaining the pre and post-level of performance, and these results indicate the areas that require further enhancement (Oakland & Tanner, 2007).
- **Behaviours:** This refers to the attitudes, values and beliefs of individuals in the organisation. Employees' beliefs in coping with a particular change initiative are important, and the presence of support from leadership is imperative for creating readiness towards implementing change (Rusly et al., 2011).

2.4 Change management models

Change management models describe the activities that must be undertaken in order for organisations to initiate and successfully execute change (Cummings & Worley, 2009). Numerous change models have been developed to assist organisations in implementing planned change.

2.4.1 Lewin's change management model

Lewin's change management model was one of the earliest change management models which regarded change as a modification of forces that keeps a system's behaviour stable (Cummings & Worley, 2009). Lewin's change management process consists of three steps: unfreezing, moving and refreezing.

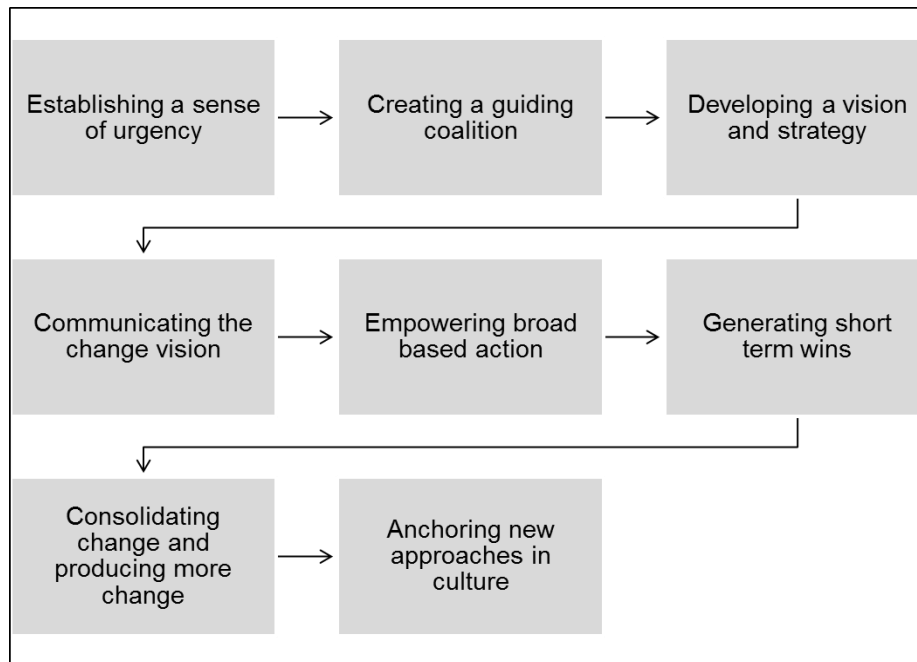
- **Unfreezing:** This process involves reducing the forces that maintain the organisation's status quo. By communicating information to employees, for example: showing the discrepancies between current and desired state of behaviour, organisational members can be motivated towards engaging in the change activities. Creating readiness and willingness to change is deemed the initial step towards removing old behaviours and habits, as well as ways of thinking, prior to implementing change (Fritzenschaft, 2014).
- **Moving:** This step in the process involves the movement of the organisational behaviour to a new level and includes the development of values and attitudes through changes in organisational structures and processes. Leadership and assurance are vital for ensuring success at this stage. This step is associated with the actual change implementation in the organisation.
- **Refreezing:** This step occurs after the change has been implemented, and it stabilises the organisation at a new state of equilibrium. This is usually accomplished through the use of supporting mechanisms that assist in reinforcing the new organisational state.

This model alludes to the need to discard old behaviour, structures, processes and cultures before this new approach can be successfully implemented (By, 2005). This three-step model was adopted as a general framework for understanding organisational change, but many authors have attempted to make this model more practical and have used this as a basis for further developing change management models (By, 2005; Fritzenschaft, 2014).

2.4.2 Kotter's change management model

Kotter (1995), through his seminal work, has purported that a change process undergoes a series of phases and that it usually takes a considerable amount of time. He has developed an eight-step framework for achieving successful change within organisations. Figure 5 below lists his eight steps:

Figure 5: Kotter's eight-step change framework



- **Establishing a sense of urgency:** Understand your current position, determine where you want to be and communicate this to the organisation. Appelbaum, Habashy, Malo, and Shafiq (2012) have indicated that people will not change unless there is a reason to do so.
- **Create a guiding coalition:** A group/team which has high authority and credibility within the organisation should be formed to champion the change initiative.
- **Develop a vision and strategy:** Create a vision and strategy for the change initiative, to direct it towards achieving its objective, and a strategy supporting this vision.
- **Communicate the change vision:** Communicate the vision to organisational members at every opportunity.
- **Empowering broad-based action:** Actively engage people within this change effort and empower them to think about how to achieve the change.
- **Generating short-term wins:** Plan for short-term visible performance improvements. Recognise and reward people for their achievements and involvement, and reinforce behaviours that have contributed towards the change initiatives.

- **Consolidating change and producing more change:** Reinforce behaviour that has contributed to change and encourage more participation so that momentum in the change process is not lost and more change is produced.
- **Anchoring new approaches in culture for sustained change:** The change must become part of the new culture of the organisation, at the level of the people, to ensure its sustainability.

Kotter is one of the most cited authors in terms of change management (Fritzenschaft, 2014). This indicates that his work has provided numerous insights in this field and his eight-step model which is described above will, therefore be consulted in answering the research questions.

2.4.3 Alignment of change management framework and model

The two frameworks developed by Oakland and Tanner (2007) and Kotter have been aligned such that Kotter's eight steps can be segregated into a change-readiness and a change-implementation phase, which is depicted in Table 2 below:

Table 2: Alignment of Kotter and successful organisational change framework

Oakland and Tanners Successful organisational change framework		Kotter's eight steps
Change Readiness	Need for Change	Establishing a sense of urgency
	Leadership and Direction	Create a guiding coalition
	Planning	Develop a vision and strategy
Change Implementation	Organisation and Resources	Communicate the change vision
		Empowering broad based action
	Systems and controls	Generating short term wins
	Behaviours	Consolidating Change and producing more change
Anchoring new approaches in culture for sustained change		

The purpose of aligning these two frameworks is to enable the author to potentially provide insights into the research objectives and, furthermore, to be able to classify the steps that organisations have undertaken under either a change readiness or a change implementation perspective.

2.4.4 Change management strategies

Change strategies in organisations have predominantly either created economic value for shareholders or developed a long-term corporate culture (Beer & Nohria, 2000). These two strategies are termed “Theory E” and “Theory O”, respectively. Through further research on these change strategies, it was identified that by combining these two theories, organisations can satisfy their shareholders and build viable institutions through their employees simultaneously (Beer & Nohria, 2000). This has the benefit of increased profitability and productivity, as well as the ability to achieve and sustain a competitive advantage. They have proposed herein that three major change strategies can be incorporated within the change management framework.

The three strategies are:

- Theory E, which is changed based on economic value “hard measures”;
- Theory O, which is based on organisational capability. It is the “soft” approach to change. The goal of this theory is to develop corporate culture and human capability through individual and organisational learning; and
- A combination of Theory E and Theory O, which will bring about change more effectively.

These strategies of change are compared along six dimensions of change; specifically, goals, leadership, focus, process, reward systems and use of consultants. Table 3 below summarises the relevant theory against each dimension of change.

Table 3: Comparing the theories of change

Dimensions of change	Theory E	Theory O	Theories Combined
Goals	Maximise shareholder value	Develop organizational capabilities	Explicitly embrace the paradigm between economic value and organizational capabilities
Leadership	Manage change from the top down	Encourage participation from the bottom up	Set direction from the top and engage the people below
Focus	Emphasize structure and systems	Build up corporate culture: employees behaviour and attitudes	Focus simultaneously on the hard (structures and systems) and the soft (corporate culture)
Process	Plan and establish programs	Experiment and evolve	Plan for spontaneity
Reward Systems	Motivate through financial incentives	Motivate through commitment – use pay as fair exchange	Use incentives to reinforce change but not to drive it
Use of Consultants	Consultants analyse problems and shape solutions	Consultants support management in shaping their own solutions	Consultants are expert resources who empower employees

Each of the dimensions in this model has a relevant outcome, which is indicated under the relevant theory; namely, Theory E, Theory O or theories combined. This model creates an understanding of the reason/motivators behind why organisations have undertaken to implement change.

This model is relevant in this study as it aims to identify which theory or combination of theories is most prevalent in bringing about change when implementing knowledge management; in other words, knowledge management was implemented from a purely economic perspective, organisational capability perspective or both. This model will be utilised to answer one of the research questions proposed in Chapter 3.

2.5 Conclusion

The literature review has created an overview of the knowledge management process that organisations undergo in order to create, store, transfer and reuse knowledge in their organisations.

The SECI model provided an understanding of the spiralling process whereby the interaction of tacit and explicit knowledge is used to create knowledge (Nonaka & Konno, 1998). Once knowledge is created it must be stored. It was alluded to in the literature that people in organisations are generally unwilling to spend time adding content to the knowledge repositories, and this has the effect of a loss of competitiveness (Yang, 2008). Knowledge transfer has been advocated as one of the key processes for successful knowledge management implementation.

The knowledge transfer models indicate that knowledge transfer in organisations undergoes a series of stages during implementation, and the “soft issues” were identified as one of them (Guzman & Wilson, 2005). The soft issues relate to the change management dimension when implementing knowledge management.

A variety of benefits are associated with successful knowledge management implementation. Reviewing the literature on knowledge management and its associated benefits, it can be concluded that organisations can potentially lose their competitive advantage and financial position if knowledge management is not effectively implemented. Successful knowledge management literature reviews have referred to significant change management initiatives that are required to ensure effective implementation.

The theories of change management were explored to gain an understanding of how the critical success factors and barriers for knowledge management implementation align to change management. After the exploration of Oakland & Tanner's (2007) themes for successful change management and the critical success factors developed by Bishop et al. (2008) and Kuan Yew Wong (2005) for knowledge management implementation, it was concluded that the themes of successful change management and critical success factors for knowledge management correspond to each other.

From the literature review it was identified that there was a gap in the literature on the change initiatives that organisations undertake when implementing knowledge management. The author then identified two change management models that will be used to explore the change management strategies and processes that organisations undergo when implementing knowledge management.

Chapter 3: Research Questions

From the literature review that was conducted in Chapter 2, it is clear that when implementing knowledge management in organisations, the organisation must undergo a change management process in order to ensure successful implementation. Two research questions have been developed to aid in determining the change management initiatives that different organisations undertake when implementing knowledge management.

This research will be conducted through a series of interviews with knowledge management practitioners or individuals involved with knowledge management implementation in organisations. This is a qualitative approach and will not require hypothesis testing.

3.1 Research Question 1

Beer and Nohria (2000) have indicated that there are three strategies for implementing change. These are Theory E, Theory O and a combination of Theory E and Theory O. Which one of the strategies was adopted for implementing knowledge management within the organisation?

Aim: The aim of incorporating Beer and Nohria is to develop an understanding of the motivators for implementing change from a knowledge management perspective in organisations. Each of the six dimensions (goals, leadership, focus, process, reward system and use of consultants) will be presented, along with the relevant theory, specifically: Theory E, Theory O or a combination of these, and respondents will be required to answer questions that will enable the researcher to select the theory that best suits the response from the interviewee.

3.2 Research Question 2

Kotter (1995) developed eight stages for successful change management. Were all stages relevant when implementing knowledge management?

Aim: To determine the relevance of Kotter's change management framework in implementing knowledge management. The interview questionnaires will facilitate respondents in answering questions pertaining to each of Kotter's eight stages, and this will determine the relevance of this model for knowledge management implementation.

Chapter 4: Research Methodology

4.1 Introduction

New knowledge about the world must constantly be harnessed in order for society to progress; gathering this new knowledge involves formulating specific questions and obtaining answers to them (Bless, Smith, & Sithole, 2013). The purpose of this research study was to understand the change management process that organisations undertake when implementing knowledge management in their organisations. The previous chapter presented the research questions which had to be answered in terms of the two change management frameworks. This chapter explains the methodology that was used in answering those research questions.

4.2 Research Design

A researcher can design his/her research methodologies in three ways: through exploratory, descriptive or explanatory research designs. Exploratory research methodology aims to provide new insights and to evaluate topics from a different perspective; descriptive research is designed to accurately describe persons, events or situations; and in explanatory research, situations or problems are studied to provide possible explanations and relationships between variables (Saunders and Lewis, 2012).

The research methodology which has been applied in this research report is an exploratory design using a qualitative approach. This exploratory study was through semi-structured interviews with knowledge practitioners and relevant stakeholders, in selected organisations in Gauteng, who provided insights pertaining to the research questions listed.

4.2.1 Rationale

Bless et al. (2013) indicated that exploratory research is conducted when there is limited knowledge and information regarding a particular topic and it is the objective of the researcher to gain a better understanding of the subject. The literature review presented in Chapter 2 is indicative of the gap that exists in the subject area, therefore necessitating exploratory research.

Saunders and Lewis (2012) have indicated that the most common methods of collecting data using a qualitative approach are through interviews, observations and documents. Interviews may be formalised and structured using a standardised questionnaire for each respondent, or they could be informal and unstructured conversations or semi-structured intermediaries (Saunders, Lewis & Thornhill, 2011).

When conducting a semi-structured interview, the researcher provides a list of themes to be covered in the interview; however, the questions asked are not necessarily the same at each interview. The methodology that was used to collect data was a semi-structured interview process, which was deemed the most appropriate way in which to illicit responses from interviewees; this could be easily mapped out on the change management frameworks.

4.3 Population and Sampling

4.3.1 Target population

Saunders and Lewis (2012, p. 132) describe a population as “the complete set of group members”. The population for the research has been based on organisations that have implemented knowledge management systems in South Africa.

This has been broken down further, into organisations that are based in the Gauteng province. The rationale behind this choice is that Gauteng is deemed the financial hub of South Africa, and a large portion of organisations’ head offices are based here. Interviewing organisations based in other provinces would be costly and time consuming, given the limited time and resources allocated to this study. The target population would provide a fairly representative sample, which will assist in answering the research questions proposed.

The target population is therefore organisations that have implemented knowledge management in Gauteng. A list of potential organisations was identified using the author's classmates and knowledge practitioners at his organisation. A simple random sample was used to choose 12 organisations. A total of 13 interviews were then conducted with the relevant knowledge management representative in each of these organisations.

4.3.2 Sampling method

Sampling methodology can be broken into two sets. These are called "probability sampling" and "non-probability sampling" (Saunders et al., 2011). Probability sampling occurs when the researcher has a complete list of the entire population and can use a probability sampling technique that suits their intended research methodology, whereas non-probability sampling is used when a complete list of the population is unavailable.

The author has selected to use a non-probability sampling technique. This technique is used when the population is unavailable. There are five categories for conducting non-probability sampling. These are: quota sampling, purposive sampling, snowball sampling, self-selection sampling and convenience sampling (Saunders & Lewis, 2012; Welman, Kruger, & Mitchell, 2005).

Purposive sampling is used for collecting qualitative data and when the researcher uses their own judgment to choose the most suitable persons to answer the research questions (Saunders & Lewis, 2012).

Purposive sampling was used to select the sample of interviewees. MBA students (2013/2014) from the GIBS campus were contacted via email and asked to introduce the knowledge management practitioners that were employed at their respective organisations. This methodology was appropriate, as it ensured that suitable representation from each organisation was obtained; in addition, each of the businesses which were contacted was based in Gauteng. A non-probability purposive sampling technique was administered for this research process.

4.4 Unit of Analysis

Dolma (2010, p. 169) has defined a unit of analysis as “the entity being analysed in a scientific research.” The unit of analysis therefore describes the level at which the analysis will be conducted.

The unit of analysis was knowledge management practitioners or relevant knowledge management stakeholders who were responsible for knowledge management implementation at their organisations, which are based in Gauteng.

4.5 Interview Schedule Design

The interview schedule was designed around the two research questions which were developed in Chapter 3. The questions which were presented at the interviews were structured to allow respondents to provide input such that their responses could be aligned to the models underlying the two research questions developed.

A precursor statement was utilised to set the scene at the interviews:

“Organisations implement changes within their processes in response to changes within the business environment. These changes could be for pure economic reasons, i.e. to improve the bottom line of the organisation, to improve the organisational capability, or it can be done to achieve both. Within this next set of questions, I would like to understand the motivators for change as well as how it was implemented within your organisation from a knowledge management perspective.”

Following this precursor statement 16 questions were developed and posed to respondents, which assisted in answering the research questions in Chapter 3. The interview schedule is presented in Annexure 1.

4.6 Data Collection

The data-collection process involved semi-structured interviews with knowledge management practitioners and relevant knowledge management stakeholders in their respective organisations. An interview schedule was used to assist in prompting responses from individuals, which were recorded and thereafter transcribed.

Prior to collecting data, a pre-test was undertaken to determine the effectiveness of the interview schedule designed and also to judge the length of the interview and obtain a feel for the level of interaction that these questions created. The data collection process was broken down into two stages:

- Stage 1: Pre-test of interview questions and structure of interviews; and
- Stage 2: Data-collection process.

4.6.1 Stage 1: Pre-test

A pre-test was conducted with a knowledge manager at the author's organisation. The interview schedule was piloted to determine whether any changes were required. With the permission of the manager, the interview ran for approximately one hour. This was treated as a formal interview whereby the respondent was requested to sign a consent form and thereafter the entire purpose was set out. This pre-test was also recorded to determine quality of the recording and whether it was appropriate for accurate transcriptions.

After the interview was conducted it was ascertained that certain questions required rephrasing prior to the author obtaining ethical clearance. These changes were made and ethical clearance was obtained; this is attached in Annexure 2.

4.6.2 Stage 2: Data-collection process

Interviews were scheduled with respondents from the various organisations that had responded to the author's initial request. Appointments were scheduled for approximately one hour per interview.

Each respondent was required to complete and sign a consent form, attached in Annexure 3, to indicate their willingness to participate in the interview. Each interviewee was informed that the interview would be recorded and that the transcripts and recordings could be made available to them on request.

The interview schedule guided the conversations towards specific information that was necessary to answer the research questions. The purpose of the interview schedule was to ensure that consistency was maintained throughout all the interviews conducted.

4.6.3 Interview List

The interview list below specifies the respondents that participated in this research study:

Table 4: Interview list

Respondent	Job Title	Industry Sector
R 1	Learning Manager	Engineering and technology
R 2	Human Resource Manager	Insurance
R 3	Middle Manager – Knowledge Management	Electricity
R 4	Senior Advisor – Knowledge Management	Electricity
R 5	Document and Records management Specialist	Transportation
R 6	Information Management Manager	Mining
R 7	Specialist Knowledge Management	Postal Services
R 8	Senior Project Manager	Engineering and technology
R 9	Knowledge Management Leader	Consultancy
R 10	Knowledge Management Consultant	Consultancy - Self employed
R 11	Knowledge Manager	Insurance
R 12	Project Management Officer	Telecommunication
R 13	Manager: Knowledge Management	Financial Services

4.7 Data Analysis

This research study was a qualitative study. Audio recording and transcription of these interviews were necessary in order to conduct an analysis of the findings from each interview. These transcriptions underwent content analysis to determine the main themes and findings. Stemler (2001, p. 240) has defined content analysis as “a technique for making inferences by systematically and objectively identifying special characteristics of messages.”

There are two essential components to content analysis:

- Identifying those key substantive points; and
- Putting them into categories.

These main points were then placed into categories according to the relevant questions. This information was captured on Excel, which enabled the author to compare and contrast responses from the respondents.

The findings from the interviews were then mapped out onto Kotter's eight-stage framework and Beer and Nohria's change strategies. Table 5 below aligns the interview schedule questions with the research questions that enabled the grouping of data towards the respective research questions:

Table 5: Alignment of interview questions towards research questions

Interview Question	Alignment to Research Question
What are the knowledge management practices that your organisation has implemented to retain tacit and explicit knowledge?	Introduction
Can you describe the main goal/motivation for implementing knowledge management in your organisation?	Research Question 1
Leadership plays a pivotal role when any solution is developed and rolled out in an organisation. Can you describe the role leadership portrayed when implementing knowledge management and indicate whether employees contributed towards the goal and target setting for KM implementation.	Research Question 1
Did the change associated with knowledge management implementation focus on the "hardware" (organisational processes and systems) or the "software" (organisational culture, behaviour and attitude) or a bit of both? Explain?	Research Question 1
Can you describe the process used for planning knowledge management implementation?	Research Question 1
Can you describe the reward mechanism utilised to motivate the implementation of KM?	Research Question 1
Can you describe the role of consultants in implementing KM?	Research Question 1
Can you rate the level of urgency that was created by the organisations leadership for knowledge management implementation?	Research Question 2
Can you describe the group/team that was formed to champion knowledge management implementation?	Research Question 2
Can you describe the vision and strategy your organisation developed for implementing KM?	Research Question 2
How often was the vision for knowledge management communicated to employees?	Research Question 2
How often were employees engaged towards understanding the knowledge management effort and where they involved in providing input towards its implementation?	Research Question 2
Were there specific milestones communicated for the implementation or progress of KM, and how were people rewarded for achieving these milestones?	Research Question 2
Did the achievement of the aforementioned milestones encourage employees to embrace knowledge management in their working environment?	Research Question 2
What are the measures that have been put forth to ensure that KM practices are instilled within the culture of your organisation?	Research Question 2
Do you think that knowledge management has been a success in your organisation? Explain	Conclusion

4.8 Confidentiality and Anonymity

Ethics approval was obtained through the GIBS ethics committee, and this is attached in Annexure 2. As part of this approval, it was indicated to all respondents that the information collected will be kept confidential and will not be disseminated to any other parties, other than those intended for this research. Participants and their organisations have been kept anonymous; the job title of each participant and the industry sector which they represent has been indicated in this research report, which ensures anonymity. The audio recordings of the interviews and the transcriptions done thereafter are kept confidential.

4.9 Data validity and reliability

Golafshani (2003, p. 598) has defined data reliability as the “extent to which results are consistent over time”. Reliability ensures consistency when the same study is attempted again and the results support those of the initial study (Zikmund, Babin, Carr, & Griffin, 2010). There are 4 factors that threaten the findings obtained: subject error, subject bias, observer error and observer bias (Saunders et al., 2011). Subject error was reduced, as the interviews were conducted with knowledge practitioners from 12 different organisations. “Subject bias” refers to unreliable information which is obtained from respondents; information can be unreliable when respondents are fearful that exposing the truth might create a negative perception of them. This was however eliminated as each respondent was made aware of the nature of this research and that information that was collected will be kept strictly confidential. “Observer error” refers to the fact that the same question can be phrased in different ways for different respondents, which can bias the results. This was limited, as the same set of questions and similar examples were presented to each respondent to ensure consistency and to reduce this type of error. “Observer bias” refers to the interpretation of the same data in different ways, which can bias findings and conclusions. Participants were prompted to provide more detail to responses that they had provided in order to reduce the ambiguity in their responses.

Data validity represents the accuracy of a measure and the extent to which this measure represents a concept (Zikmund et al., 2010). There are two types of validity: internal validity and external validity. Internal validity was ensured through interviewing multiple organisations; the interviews were conducted over a three-week period.

“External validity” refers to the extent to which results from the research can be generalised (Zikmund et al., 2010). This was ensured by the author, as the same set of questions and references was presented at each interview, which enabled each respondent to engage on a similar platform. This enabled conclusions to be generalised.

4.10 Research Limitations

The following is a list of the key limitations that the author foresees in the proposed research methodology, as well as within the scope of the study:

- The chosen research methodology was qualitative. This methodology was exploratory in nature and will require a more detailed quantitative analysis of these findings to determine accuracy of results obtained.
- The sampling technique which was utilised is purposive sampling. Biases will occur, as the sample would mostly include organisations that are represented in the author’s 2013/14 MBA part-time group.
- The sample size was confined to organisations based in Gauteng and may not provide a representative sample of the population. These results may not be generalised among the population.
- The change management model used as a basis in this study is Kotter’s eight-stage framework and Beer and Nohria’s strategies for change model. This limited the response received to these frameworks and does not take into consideration all other change management models that are utilised by organisations.
- Translation of the results obtained may affect the validity of the research results.

4.11 Conclusion

This chapter highlighted the methodology that was undertaken to conduct this research. The methodology adopted was a qualitative approach, utilising a purposive sampling technique. The qualitative approach was through semi-structured interviews. These interviews were recorded and thereafter transcribed. The interview schedule was aligned to the research questions, which assisted in grouping data received. Limitations to this methodology were provided and can assist in future research on this subject.

Chapter 5: Results

5.1 Introduction

The previous Chapter provided the research methodology that was followed to gather research data. Data was captured through semi-structured interviews with 13 respondents. The interviews were recorded and thereafter transcribed. The analysis process commenced with creation of a data table in which a summary of the individual respondents' answers was captured. This facilitated in aligning the responses received with specific theories and steps in the change management models of Beer and Nohria as well as Kotter. This chapter provides a summary of the outcomes that respondents provided for each of the questions which were aligned to the research questions presented in Chapter 3.

5.2 Sample

There were 13 interviews conducted in order to obtain insight into the research questions proposed. The following is a summary of the respondents' feedback from the interviews. The background of the 13 interviewees is presented in the order in which the interviews were conducted. Respondents requested to be anonymous; therefore, only their title within their organisations is mentioned, as well as the industry sector which they represent.

Learning Manager (R1)

The learning manager represents a multinational company in the technology industry and is responsible for ensuring that employees within the business receive adequate training on products and services which they offer. She is also responsible for obtaining input from other business units in her organisations on areas where skills are required to be developed.

Human Resource Manager (R2)

The human resource manager is employed in the insurance industry and is responsible for knowledge management implementation. She specifically acted as a change agent to ensure that knowledge management is implemented throughout the business.

Middle Manager – Knowledge Management (R3)

The middle manager for knowledge management is employed within the engineering industry and is responsible for developing a strategy for knowledge management implementation at her organisation. She is also responsible for giving advice to the organisation on the tools and practices that should be implemented in order to capture the knowledge in the organisation.

Senior Advisor – Knowledge Management (R4)

Respondents 3 and 4 are employed at the same organisation. The senior advisor – knowledge management is responsible for the implementation of knowledge management practices within respective business units in their organisation.

Document and Records Management Specialist (R5)

Respondent 5 is a document and records management specialist in the transport and logistics environment. He is responsible for setting up the infrastructure for document and records management, and ensures that this is rolled out within the organisation.

Information Management Manager (R6)

Respondent 6 is employed at a large global mining firm. He is the manager for information management. His key roles and responsibilities are to ensure that the information technology platform is adequate and conducive for information sharing. He is also responsible for ensuring that the hardware for knowledge management tools is implemented and that end users (employees) have sufficient training and skills to use these platforms for information and knowledge sharing.

Specialist Knowledge Management (R7)

The specialist knowledge manager was brought into the organisation to create and facilitate a knowledge management programme within their organisation. She is employed in postal services. Her role was to ensure that a knowledge management audit was conducted and that a solution and implementation plan can be created to facilitate knowledge management implementation.

Senior Project Manager (R8)

The senior project manager is employed in a global firm that supplies power and automation technologies. His role is to ensure that all projects within his portfolio are successfully implemented. The role that he represents towards knowledge management is to ensure that during the entire project lifecycle, knowledge is created and disseminated through the organisation.

Knowledge Management Leader (R9)

This respondent was recently appointed as the knowledge management leader in one of the large consulting industries. Her responsibility is to develop strategies and implementation plans for rolling out knowledge management practices at their organisation.

Knowledge Management Consultant (R10)

Respondent 10 is a knowledge management consultant who has about 14 years of knowledge management experience. Her experience in knowledge management ranges from working with research companies to working with multi-national companies and consulting companies. She has recently started her own knowledge management practice, in which her focus is on strategies for business from a knowledge-management perspective. This field also focuses on the change management aspect for knowledge management implementation.

Knowledge Manager (R11)

This respondent is employed at a large insurance firm as a knowledge manager. Her responsibilities include running the library and information services and also developing and implementing policy around knowledge management in the organisation.

Project Management Officer (R12)

The project management officer works in the telecommunications industry. Her responsibility is to ensure that all project information is captured according to the International Standards Organisation (ISO). Part of this portfolio includes knowledge management, whereby knowledge is created and disseminated through document management systems and knowledge management portals.

Manager: Knowledge Management (R13)

Respondent 13 is employed in a financial institute. She is responsible for knowledge management in personal and business banking (PBB) in South Africa. She develops strategies and implementation plans, and rolls out approved knowledge management practices in her organisation.

5.3 Results

5.3.1 Research question (Introduction)

An introductory question was asked of all respondents, to identify the knowledge management practices that their organisations have implemented to retain tacit and explicit knowledge. Table 6 below displays the findings from each respondent. The findings are ranked in descending order, from the most frequently used practices to the least frequently used, across all the organisations interviewed.

Table 6: Knowledge management practices utilised in organisations

Knowledge Management Practices	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Document and Records Management			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8
Collaboration Tool (SharePoint)	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7
Lessons Learnt			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6
Communities of Practise			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	6
Knowledge Sharing sessions			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			5
Local Drives	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		4
Job shadowing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						4
Internal Training	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					3

“Document and records management”, “collaboration tools (SharePoint)” and “lessons learnt” are ranked as the top three knowledge management practices, respectively, which are used at these organisations.

- **Document and records management**

Respondent	Summary of pertinent Quotation
Human Resource Manager (R2):	<i>“What we’ve started doing is we started keeping documentation so where there is a process or a, you know, something that you need to follow we’ve started putting together, sort of, a library of documents so that a new employee can come in and say right, this is what I need to know, this is what I need to understand.”</i>
Information Management Manager (R6):	<i>“We use a tool, well at the moment we have an enterprise tool called Documentum, So we structure it in a manner that tries to align as close as possible to our records management policy. So we look at it from a perspective of legislative on the one hand, you know compliance, regulatory and then secondly from a knowledge management and maintenance of IP for medium to long term.”</i>

- **Lessons learnt**

Respondent	Summary of pertinent Quotation
Senior Advisor – Knowledge Management (R4):	<i>“Currently really our knowledge management framework specifically looks at lessons learnt. That’s a major key focus currently in the business. I mean there are quite a number of other elements that you can build in to ensure that knowledge management happens proper, but we are focused on lessons learnt.”</i>

- **Collaboration tools**

Respondent	Summary of pertinent Quotation
Specialist Knowledge Management (R7)	<i>"We have an enterprise agreement with Microsoft, now given that we have paid for their services, these services includes with it SharePoint. Now SharePoint becomes then our tool or our, that affords it to be a platform of collaboration in the organisation."</i>

These three knowledge management tools represent explicit knowledge management and are ranked the highest in terms of usage in organisations.

Evident from the table above is that explicit knowledge management practices are more widely utilised than tacit knowledge management practices.

Respondent	Summary of pertinent Quotation
Manager: Knowledge Management (R13)	<i>"I have to be very honest we have very little in place for tacit knowledge but we have done quite a lot of work on explicit knowledge."</i>

5.3.2 Research Question 1 – Beer and Nohria’s strategies for change

Research Question 1 aligns with the six dimensions/motivators of change proposed by Beer and Nohria. These six dimensions, which are: goals, leadership, focus, process, reward system and use of consultants, are aligned with questions 2 – 7 on the interview schedule. The response from each interviewee underwent content analysis to determine the themes from the responses. These themes were then mapped out on each dimension of change proposed by Beer and Nohria; specifically, Theory E, Theory O or Theory E&O (combination). In some instances, respondents were not able to answer the question and the total responses for some of these dimensions may, therefore, not amount to 13.

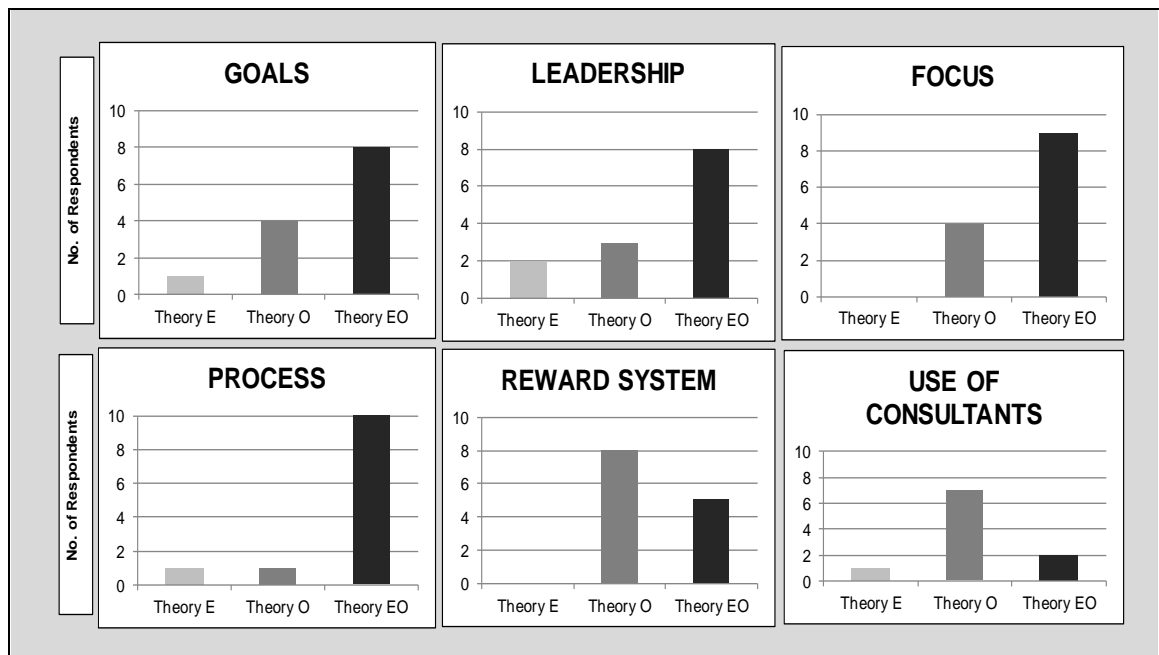
Each respondent was read the following precursor statement, which was provided with the aim of guiding their responses to the questions which related to this framework:

“Organisations implement changes within their processes in response to changes within the business environment. These changes could be for pure economic reasons, i.e. to improve the bottom line of the organisation, to improve the organisational capability, or it can be done to achieve both.

Within this next set of questions, I would like to understand the motivators for change as well how it was implemented within your organisation from a knowledge management perspective.”

Figure 6 below provides a summary of the responses for each dimension. An overview of each will be provided, along with pertinent quotations that were received from the interviewees.

Figure 6: Summary of responses for Research Question 1



- **Goals**

This question required respondents to identify the main goals/motivators for knowledge management (KM) implementation within their organisation. Eight out of thirteen respondents had indicated that the main reason for knowledge management implementation was from an economic as well as an organisation capability perspective.

Respondent	Summary of pertinent Quotation relating to "Goals"
Learning Manager (R1)	<i>"So, for me, within a team, within a business unit or even with our unit, I believe that in order for business to continue – you know, if the knowledge is there, if the access is there, if anyone can basically continue.... definitely to enhance capability."</i>
	<i>"It's not even a local initiative, it's globally driven and the other economic side, for me, it's really about productivity. So, if the information is there, you're saving a lot of time, effort and essentially money because someone does not have to re-, go and get everything."</i>
Middle Manager Knowledge Management (R3)	<i>"Bridge the knowledge gap...Due to the fact that we had a lot of, the most knowledgeable human capacity in the Business retiring."</i>
	<i>"There was the fact that we did not have the high level of knowledge attrition, we do not have records, documents. You would have projects that ended up having three times the actual cost just because of design changes, because there is no record."</i>

It is evident from the sample that the goal of most of these organisations, when implementing knowledge management, is to enhance organisational capability as well as to improve the bottom line. Some organisations, however, do it purely to improve their financial position, whereas others do so purely for improving their organisational capability perspective, as evident from responses 1 and 4 respectively under this dimension.

- **Leadership**

Leadership plays a pivotal role in implementing and rolling out any solution in an organisation. This dimension was explored to determine whether knowledge management implementation was managed from a top-down or bottom-up approach, or a combination of these. Eight of the thirteen respondents indicated that this was a two-way approach; namely, a top-down, bottom-up approach.

Respondent	Summary of pertinent Quotation relating to "Leadership"
Learning Manager (R1)	<i>"Within the environment itself, if the skills are not there, yes, the employees will inform managers, managers will inform employees, so it's kind of like I said top-down, bottom-up – it's two-fold."</i>
Manager: Knowledge Management (R13)	<i>"So yes leadership played extremely vital role in my knowledge management implementation and I would not have been as successful were it not for their support. I had phenomenal leaders and I have had phenomenal leaders right now really backing me, supporting me whatever I say they will communicate on my behalf and drive the behaviour and they also lead by example that is really something amazing in this organisation...In terms of employers contributing towards the goals and target setting for KM there was interaction we elicited requirements we did a as is analysis in the form of a knowledge management audit."</i>

- **Focus**

This dimension of the model focuses on the “hardware” – organisational structures and systems, and the “software” – culture and behaviour of employees. The question in this dimension solicited respondents to indicate which of these two, or whether a combination of the two, was more prominent when implementing knowledge management. Through the results, it was evident that organisations subscribe unanimously to a combination of theories (9 of 13).

Respondent	Summary of pertinent Quotation relating to "Focus"
Knowledge Management Consultant (R10)	<i>"Both, it was really both it was trying to get the systems and processes , worked out , and it was done through the culture and you know connecting people and it, it was definitely both"</i>
Knowledge Manager (R11)	<i>"It was a bit of both because previously there had never been a holistic approach to how business is conducted as far as systems were concerned..." "The company is a very relaxed environment where people are actually allowed to make decisions and all of that..I think, sometimes, that kind of culture, actually also made it difficult for top management to introduce like structured ways of doing things whereby people are allowed to be relaxed in an environment that is relaxed."</i>
Project Management Officer (R12)	<i>"Both, absolutely both the hardware stuff was usually initially really really time consuming...to get people to use it to get them to know how to use it and get them to want to use it and get them to become your advocate and to do it perfectly that is your biggest biggest biggest job and it's a job for life you will never ever stop doing it. I personally think as a knowledge manager, and as knowledge management team we should be spending 80% of your efforts on that, not on the hardware side. "</i>
Human Resource Manager (R2)	<i>"Probably a bit of both but I think more culture, values, that sort of thing...what we did actually was we used the culture to leverage, so in any change management process you need it eventually to become a way that you do things and that's what we tried to do with the culture. So we tried to change or shift the culture so that this is just the way that we do things."</i>

- **Process**

This dimension focuses on the plan that has been developed for knowledge management implementation. The focus is on determining whether senior management sets the implementation framework (Theory E); whether employees were allowed to provide their input, to improve the plan (Theory O); or whether there was a combination (Theory E&O). One respondent did not comment on this question. Ten of the remaining twelve participants indicated that they subscribed to Theory E&O (combination).

Respondent	Summary of pertinent Quotation relating to "Process"
Human Resource Manager (R2)	<i>"We started with talent management...then we looked at people that have potential to perform at that level but that need, you know, they obviously need the experience so probably the younger bunch and that's where we started with knowledge management".</i>
Specialist Knowledge Management (R7)	<i>"The planning framework as I have said it starts from a strategy development...hence I say from the strategy then it would be the design the design framework to say okay, how do we design this now to fit into our organisation..., people want involvement you can only own if you participate, fully participate and you know then you understand you will be passionate about it."</i>
Knowledge Management Leader (R9)	<i>"I took a look at our firm and how our firm is structured and what it was that people needed access to in our member firm and then put in...put a plan in place to get people to access that information....my implementation plan saw that I needed to make people aware of knowledge management, aware of what knowledge management is and what it is that I can offer as knowledge management and by doing that I needed to now do my bottom up approach and bottom up or top down approach ... after that the proper project plans you know your proper project methodology happens".</i>

- **Reward systems**

This area focuses on the reward mechanism which is utilised for knowledge management implementation. Theory E indicates that there was a financial incentive for senior management; Theory O suggests the contrary and indicates that buy-in was obtained purely due to the business needs; and Theory E&O suggests a combination of these. From the information that was gathered, 8 of 13 respondents indicated that information was obtained purely due to business requirements.

Respondent	Summary of pertinent Quotation relating to "Rewards"
Senior Advisor – Knowledge Management (R4)	<i>"We have ideas as to how that can be done in line with our HR processes, but as we see it right now there is no official formal reward and recognition process in place related to knowledge management"</i>
Information Management Manager (R6)	<i>"So we don't have a reward mechanism per se. We have a risk management and compliance based drive if I can put it like that. So obviously from a business perspective we manage risk and knowledge will be high up on that ranking, to make sure that knowledge is maintained, knowledge is transferred, knowledge is inducted into new people and then secondly for us to be compliant to all policy documents, legislation, rules of the exchanges and so on is what's critical"</i>
Knowledge Manager (R11)	<i>"We haven't really identified any reward structures and whatever because it was felt that if we always try and reward people for doing the right thing it wouldn't be inculcated into their culture... They mustn't see it as just another incentive. 'I'm doing this so that I can get a ...' because when the implementation phase is over people will get back to their old habits."</i>

- **Use of consultants**

This dimension looks into the use of consultants during knowledge management implementation. Each respondent was asked to explain the role that consultants played during knowledge management implementation. The results were then categorised under the relevant theory. Three of the respondents did not use consultants; therefore, their responses were not relevant to the framework. Seven of the remaining ten, however, subscribed to Theory O, which indicates that consultants provide support for management towards shaping their own solutions for knowledge management implementation.

Respondent	Summary of pertinent Quotation relating to "Use of Consultants"
Human Resource Manager (R2)	<i>"One consultant we did use, I guess, was a strategy consultant that facilitated a strategy session right at the beginning of this process before all of this was implemented so to guide us in coming up with the strategy."</i>
Middle Manager – Knowledge Management (R3)	<i>"We got a Consultant who helped us to put in a framework..."the value that they brought helped us look at how we can set up, this based on the business culture that exists in the processes and so forth."</i>

All the respondents who subscribed to Theory O had similar responses to this question.

One respondent, however, subscribed to Theory E. What was interesting about this company was how the consultants were used to obtain knowledge management buy-in from senior management.

Respondent	Summary of pertinent Quotation relating to "Use of Consultants"
Knowledge Manager (R11)	<i>"I think for us, the consultants was to show management and the company this is best practise and it's done across industries, across the world and here is a person who is not part of our organization who can prove that, in fact, this works. We were not experts in implementing these kinds of things, so I think it was important that we had the necessary expertise to ensure that we get buy-in... Bottom up approach – Testament on how the organisation is run."</i>

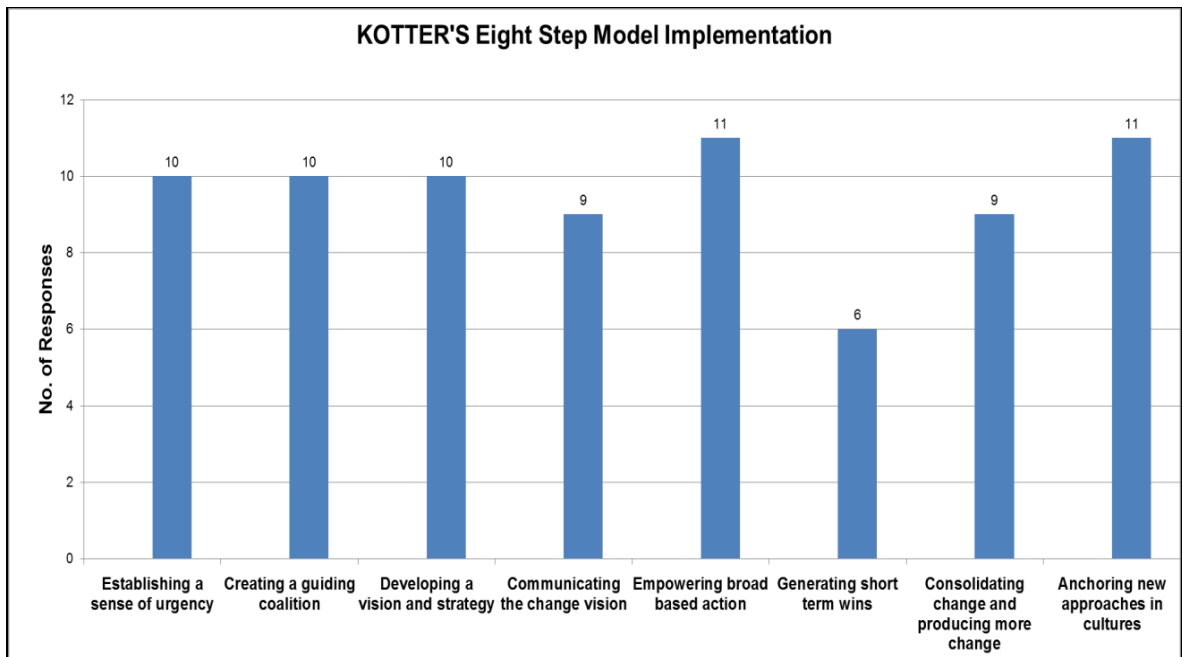
The respondent acknowledged that this is not their field of expertise and accepted that a consultant was in a better position to obtain senior management buy-in.

5.3.3 Research Question 2 – Kotter’s change management framework

Research Question 2 relates to the change management framework developed by Kotter for successful change implementation. The series of questions for respondents was aligned with this change management framework. These would be analysed to determine whether this model is relevant for successful knowledge management implementation.

Figure 7 below illustrates the total responses for each of Kotter’s eight steps. The details for each step of this change management framework will be listed in the sections to follow. The most pertinent quotes will be noted under each step.

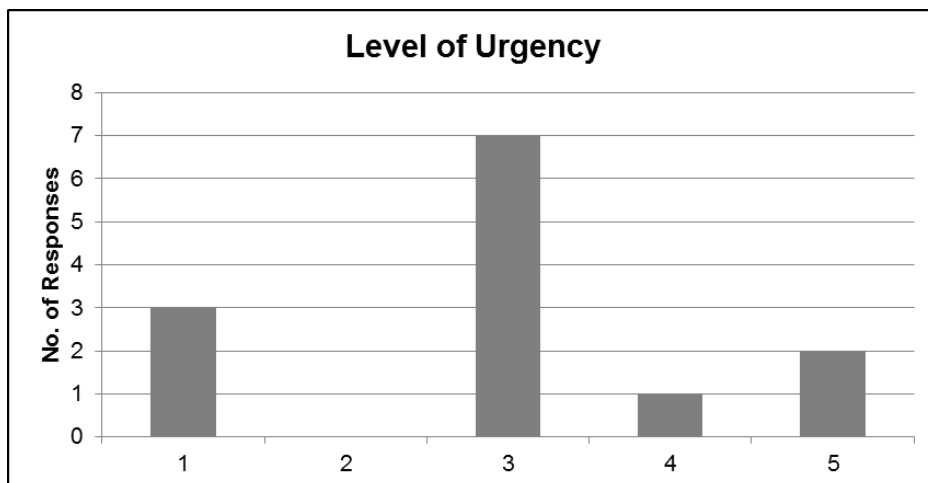
Figure 7: Responses for Kotter's eight-step change framework



- **Establishing a sense of urgency**

This question solicited respondents to indicate, on a Likert scale, the level of urgency which was created by senior management regarding knowledge management implementation. Respondents had to choose a rating from 1 – 5, where “1” indicates “no urgency”, “3” indicates “urgent” and “5” indicates “tremendously urgent”. Figure 8 below depicts the responses.

Figure 8: Level of urgency



Ten of thirteen respondents indicated that senior management did create a sense of urgency in light of knowledge management implementation.

Respondent	Summary of pertinent Quotation relating to "Level of Urgency"
Information Management Manager (R6)	<i>"Urgent, due to some audit findings that were raised. we had some audit findings that we had to take care of so there was some urgency into it and there were some weaknesses in terms of the process how things were being done so in order to medicate to resolve those weaknesses in the practises we needed to implement some systems that can address that."</i>
Human Resource Manager (R2)	<i>"our knowledge management is very closely related to our talent management. There's an urgency around talent management"</i>

One respondent indicated that an overwhelming sense of urgency was created by senior management.

Respondent	Summary of pertinent Quotation relating to "Level of Urgency"
Manager: Knowledge Management (R13)	<i>"Core banking we have got 5 as the most it was 6, they wanted it yesterday and the same is happening in the new space now like come come come come come we actually can't keep up with the demand."</i>

- **Creating a guiding coalition**

A guiding coalition is a group/team which has high authority and credibility in the organisation that championed knowledge management implementation. Respondents were required to indicate the team that was formed to champion knowledge management. The table below indicates the responses from the 13 respondents:

Respondent	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Creating a guiding coalition	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10

Ten of the thirteen respondents indicated that a group with high authority was created to champion knowledge management implementation.

Respondent	Summary of pertinent Quotation relating to "Guiding Coalition"
Document and Records management Specialist (R5)	<i>"It goes back to the steering committees and the committees that were formed because you needed and HR function in it you needed an IT element in it and then you needed the records management aspect of it...So basically you started from the top and created a whole group that assisted in implementation."</i>
Knowledge Manager (R11)	<i>"We had a champion who actually drove the project; he was called a Project Sponsor. Then we had people from IT, like our internal IT department. They had the head of architecture, the head of whatever – so those were the people who were in the team."</i>

- **Develop a vision and strategy**

This question required respondents to identify the vision and strategy that was developed for knowledge management implementation.

Respondent	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Developing a vision and strategy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10

Ten of the thirteen respondents indicated that a vision and strategy were developed.

Respondent	Summary of pertinent Quotation relating to "Vision and Strategy"
Information Management Manager (R6)	<i>"So from a vision point of view obviously it was more around minimising risk and having a good handle of all our information assets, as well as doing it simply. Minimising risk and having a good handle of all our information."</i>
Specialist Knowledge Management (R7)	<i>"we defined knowledge management in [the organisation] to be given the right information to the right people at right time in the right context... In order to support their business strategy objectives...with a vision of entrenching knowledge and culture in the organisation."</i>
Knowledge Manager (R11)	<i>"It was devised to connect with the business strategy of the organization as a whole and also change what happens and make us more structured in our approach in how we do work."</i>

- **Communicate the change vision**

This question required respondents to identify the frequency in which the vision for knowledge management was communicated in the organisation.

Respondent	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Communicating the change vision	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9

Nine of the thirteen respondents indicated that the vision for knowledge management was communicated to employees frequently.

Respondent	Summary of pertinent Quotation relating to "Communicating the Change"
Senior Advisor – Knowledge Management (R4)	<i>"within [business unit] this was done literally on a month to month basis, because we had a newsletter to start with which I think was a brilliant platform to actually ensure that people are aware of what KM is."</i>
Information Management Manager (R6)	<i>"So obviously during the project it was communicated in different shapes and forms you know. I would say consistently we had a very strong change management team because that was really the crux of the project. The sort of vision was communicated in different shapes and forms via posters, via communication on e-mail, via meetings, change agent type of engagements, so constantly. I think that it's obviously very important that you drive the change program by effective comms. "</i>
Senior Project Manager (R8)	<i>"We had continuous communications be it via colleagues or via our retail communication group communication. So it's very frequent."</i>

- **Empowering broad-based action**

This question sought to determine how often employees were engaged to understand the knowledge management and also to determine whether they provided input in knowledge management implementation.

Respondent	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Empowering broad based action	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11

Eleven respondents indicated that employees were often engaged with the knowledge management process and that they did provide input in its implementation.

Respondent	Summary of pertinent Quotation relating to "Empowering Broad Based Change"
Learning Manager (R1)	<i>"A lot of the training that we've done would include Knowledge Management Systems. A lot of the courses have it. Of course they provide their input because they have to do the work, so, yes, definitely, they provide the input in terms of streamlining, making things more efficient, coming up with ways to make the environment better. Yes, all of that. I have never seen a manager, or heard a manager turn it down or say no, but they're all very much supportive of it."</i>
Middle Manager – Knowledge Management (R3)	<i>"Yes very highly so, when we did the analysis, we did the assessments, input; how would you want it, change – we did, workshops on different projects, introducing awareness sessions and like I said, the newsletters were one of our communication and change tools as well."</i>
Knowledge Management Leader (R9)	<i>"From a leadership point of view like the partners and directors that I have spoken to have been very engaged so they, they have their own needs and requirements from knowledge management which we trying to assist with. So really I think that people understand what we trying to do, they understand the need for it and there, yes I think that they're quite engaged and involved."</i>

- **Generating short-term wins**

Respondents were requested to indicate the rewards that were provided for achieving short-term milestones/goals.

Respondent	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Generating short term wins	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6

Only six respondents indicated that there was some form of reward for achieving milestones. This step was subscribed to the least of all of the eight steps proposed by Kotter.

Respondent	Summary of pertinent Quotation relating to "Generate short term wins"
Learning Manager (R1)	<i>"it's a monetary reward, it's a recognition, simple things – taking the team out for a job well done; that kind of thing."</i>
Information Management Manager (R6)	<i>So yes they were definitely communicated during the project, key milestones and what needed to be done to get there. There wasn't really an award type system. I mean there was recognition of making deadlines, recognition of achieving certain key milestones. People were interviewed. People were put into newsletters, those kinds of things."</i>

Respondents indicated that short-term wins/rewards were not offered to employees, as this would encourage the wrong behaviour for doing the right thing. Some organisations however, provided intangible rewards such as acknowledgement in newsletters, amongst other things for employees who had contributed significantly towards knowledge management implementation.

- **Consolidating change and producing more change**

Respondents were asked if the milestones achieved encouraged employees to embrace knowledge management in their workplace.

Respondent	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Consolidating change and producing more change	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9

Nine respondents indicated that the achievement of milestones encouraged employees to embrace knowledge management in the workplace.

Respondent	Summary of pertinent Quotation relating to "Consolidating Change"
Knowledge Management Consultant (R10)	<i>"I think it did, because you know they had the support that they needed in so many ways , and even if it went beyond just knowledge management services they had a lot of support."</i>
Manager: Knowledge Management (R13)	<i>"Definitely if I can start naming the people that have contacted me once they have left the team for similar things... yes so yes they definitely within their teams they do it's the way of working everyone knows you go to the info hub this is where you find things if it's not on, why is it not on, what's wrong with them so it's become of way of working."</i>

- **Anchoring new approaches in culture for sustained change**

This question relates to the approach undertaken by organisations to ensure that knowledge management is entrenched into the organisation to ensure sustainability.

Respondent	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Anchoring new approaches in cultures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11

Eleven respondents indicated that some form of measure was in place to ensure knowledge management sustainability.

Respondent	Summary of pertinent Quotation relating to "Anchoring new approaches"
Senior Advisor – Knowledge Management (R4)	<i>"So our alternative right now is to ensure that knowledge management is embedded within the project life cycle model which is what they now governed, how projects are done in the business. "</i>
Document and Records management Specialist (R5)	<i>"We communicate, we communicate, communicate in a lot of forums...And I think in addition to that we have got policies in place that ensure that each and every person adheres to the stipulations of the policy so its certain functions are optional but you have to sort of adhere and comply".</i>
Knowledge Management Leader (R9)	<i>"That's an interesting one. We have something called a Global Expectancy Framework model... And this is a framework that we use across all firms across the globe that measures your performance...So it measures your performance at each level and it tells you in order for you to move from this level to the next level what are the things that you need to be doing, what's the level that you need to be performing at if you need to move onto the next level. And one of the things that we have in there is knowledge management".</i>

5.3.4 Research question (conclusion)

A final question was presented to all respondents, to indicate whether their knowledge management practices have been a success.

Respondent	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9	R 10	R 11	R 12	R 13	TOTAL
Do you think KM has been a success in your organisation?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9

Nine of the respondents indicated that knowledge management has been a success.

Respondent	Summary of pertinent Quotation relating to "KM Success"
Information Management Manager (R6)	<i>"So you know on the whole, yes ...it's largely been successful, but there's always room for improvement."</i>
Knowledge Management Consultant (R10)	<i>"Yes, yes, I really think it did and it's interesting because when I left they didn't replace me for about two years and it really it I, I think that , it lived on because the people know the system."</i>
Manager: Knowledge Management (R13)	<i>"yes we have been successful in what we set out to achieve....I think we have shown credibility we have shown that it can work in a very complex and high fast paced environment, core banking is rough, it's really really rough and if it can work there I think it can work for the rest of the organisation with a little bit of clever thinking."</i>

5.4 Conclusion

This chapter presented the data which was collected through the 13 semi-structured interviews. The data underwent content analysis to identify the themes that emerged and this was thereafter allocated to the relevant theories with respect to Research Question 1. Research Question 2 was based on Kotter's eight-step change framework. Respondents were required to answer questions pertaining to his proposed steps for successful change implementation. The information that was presented indicated the number of respondents who implemented each step of Kotters his model.

The chapter also provided an overview of the knowledge management practices which the 13 respondents have implemented at their organisations. The chapter concluded with respondents indicating whether their knowledge management practices have been successfully implemented in their organisations. The most pertinent quotations from respondents were also presented, to illustrate the richness and depth of the feedback provided and the findings which emerged.

Chapter 6 will present a discussion of the findings in relation to the research questions proposed and the literature presented in Chapter 2.

Chapter 6: Discussion of results

The previous chapter presented the results obtained through 13 semi-structured interviews which were aligned to the research questions proposed in Chapter 3. This chapter will present a detailed discussion of the findings and demonstrate alignment with the literature review of Chapter 2. The ultimate goal of this study is to understand:

- the strategy of change which organisations undertake when implementing knowledge management; as well as
- the relevance of Kotter's change management framework when implementing knowledge management.

6.1 Knowledge management practices

At the beginning of each interview, participants were requested to identify the knowledge management practices which they have undertaken to capture tacit and explicit knowledge. These responses were aligned to the SECI model by Nonaka and Takeuchi (1995) and the knowledge transfer model developed by Guzman and Wilson (2005) focusing on knowledge management issues.

6.1.1 Socialisation

This process inhibits the transfer of tacit to tacit knowledge. Job shadowing, which included coaching and mentoring, was one mechanism that organisations utilised to transfer tacit to tacit knowledge. Respondent 8 indicated that when junior project managers are appointed, they shadow the senior project managers so that they can adapt and learn quickly in this environment.

Respondent 11 revealed the mentoring system they have implemented to impart tacit to tacit knowledge at their organisation:

“What we have tried to do in order to try and manage our tacit knowledge data, is a mentoring system...the mentorship programme is very structured in that those who are selected to be mentors have to go through a series of courses which qualifies them to be known as mentors.”

From the analysis of the data presented in Table 6, it is evident that organisations invest minimally in mechanisms for tacit to tacit knowledge transfer.

6.1.2 Externalisation

This process is structured through the conversion of tacit knowledge to explicit knowledge. This process enables knowledge to become crystalized, allowing it to be shared by others, which becomes the basis of new knowledge (Chou, 2005). There were two knowledge management practices identified that organisations utilised for this transfer of knowledge: communities of practices and internal training.

Respondent 13 indicated that they utilised both lessons learnt and communities of practices at their organisation. This enabled knowledge transfer among the employees.

6.1.3 Combination

This process involves the conversion of explicit knowledge into a more complex set of explicit knowledge (Nonaka & Konno, 1998). This was the most utilised mechanism of knowledge transfer amongst organisations. The tools that were used in this process were: documents and records management, collaboration tools and local drives.

Respondent 7 indicated that they have an enabling agreement with Microsoft; hence, they use SharePoint to capture and transfer explicit to explicit knowledge.

Document and records management was the most utilised tool. Respondent 6 indicated that this tool was used from a compliance perspective, as well as a knowledge management perspective.

Information Management Manager (R6):

“We use a tool. Well at the moment we have an enterprise tool called Documentum; you’ve probably heard of Documentum. So we structure it in a manner that tries to align as close as possible to our records management policy. So we look at it from a perspective of legislative on the one hand, you know compliance, regulatory and then secondly from a knowledge management and maintenance of IP for medium to long term.”

6.1.4 Internalisation

This dimension focuses on the transfer of explicit knowledge to tacit knowledge (Nonaka & Konno, 1998). The tools that were utilised by respondents were: “lessons learnt” and “e-learning”.

Participant 10 revealed the mechanism which they utilised to transfer explicit to tacit knowledge:

“We do after-action reviews at end of projects and knowledge harvesting and we had all of those as great knowledge practices in place because like some projects I would be assigned to the project, and I would go see them every second week and they would do some knowledge management capturing on the project.”

“Lessons learnt” is one of the most utilised tools for knowledge capturing by organisations: 8 of the 13 respondents indicated that they utilise this tool.

6.1.5 Conclusion

Tacit to tacit knowledge transfer (socialisation) is the most under-developed area of knowledge transfer in organisations. Organisations utilised two mechanisms for tacit to tacit transfer; specifically, “job shadowing” and “coaching and mentoring”. Respondent 13 succinctly encapsulated a dilemma which all organisations interviewed were faced with: “We have very little in place for tacit knowledge, but we have done quite a lot of work on explicit knowledge”.

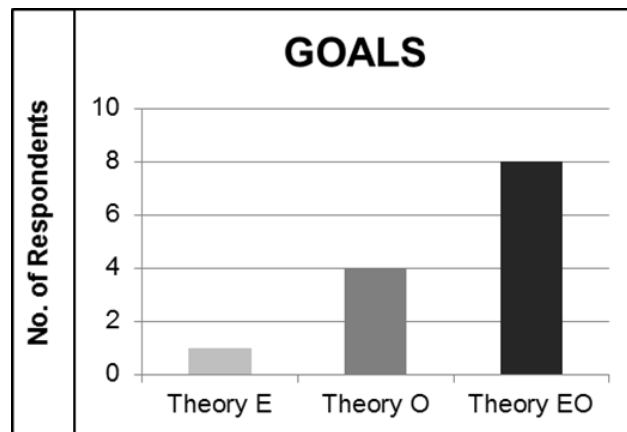
6.2 Research Question 1

Beer and Nohria (2000) have indicated that there are three strategies for implementing change. These are Theory E, Theory O and a combination of Theory E and Theory O. Which one of the strategies was adopted for implementing knowledge management within the organisation?

This question was analysed in six parts:

- The goal/motivation for implementing knowledge management;
- The role that leadership played in implementing knowledge management;
- Whether the implementation focused on the “hardware”, the “software”, or a bit of both;
- The planning process for knowledge management implementation;
- Rewards mechanisms for knowledge management implementation; and
- The role that consultants played when implementing knowledge management.

6.2.1 Goals/motivation



According to Beer and Nohria (2000), organisations follow a combination of theories with a view of maximising shareholder value and improving organisational capability. It was evident that this was supported by the majority of respondents. Some of the pertinent responses supporting this theory are provided below:

Senior Project Manager (R8):

“Knowledge is power and I think the most powerful thing is transferring of knowledge in brackets ‘experience’. There’s nothing more powerful than that. I think maybe the shortened answer is providing customer satisfaction, customer service....Customer service means repeat business. Repeat business means money and sustainability, and it’s all about keeping your business alive.”

Knowledge Management Leader (R9):

“When I try to implement knowledge management I always try to implement it from a strategic point of view. So it needs to be aligned to business strategy and obviously business strategy is based on revenue at the end of the day. And the reason why I say that it needs to be aligned to business strategy is because people often see knowledge management as a nice to have one rather than a have to have. And if you have it aligned you know that you’re also contributing towards the bottom line as well.”

It was, however, interesting to note that four respondents subscribed purely to Theory O. They indicated that knowledge management implementation took place in order to improve their organisation’s capability:

Human Resource Manager (R2):

“Our organisation is very much knowledge-based and what we’ve found is that the people that hold the knowledge hold the knowledge by virtue of experience. They gained that from years and years and years of experience and the reason we have implemented these initiatives is because what do we do when those people leave? So we need that knowledge to be transferred; it’s important that it’s transferred across the business and so our main reason is so that we don’t lose that. We don’t want to lose the experience that we’ve got from our management staff.”

Document and Records Management Specialist (R5):

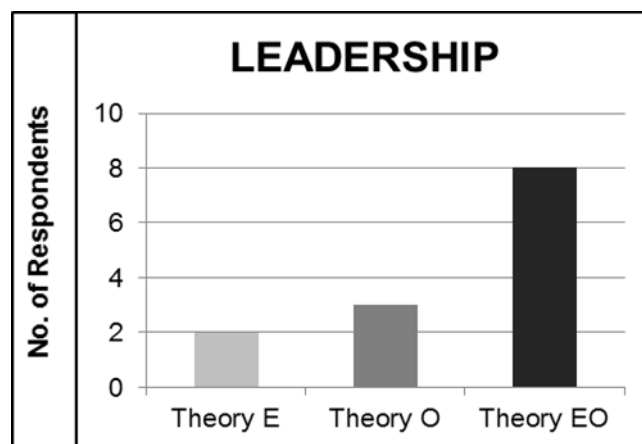
“It’s for sustainability purposes, because the company has got to move forward regardless of who is there.”

It is evident from the results that the driver for change within this dimension is a combination of theories. However, it must be noted that some organisations undertake knowledge management primarily to improve the organisation’s capability.

6.2.2 Leadership

Leadership plays a pivotal role in setting direction, inspiring change and ensuring successful implementation (Oakland and Tanner, 2007). This view is supported by Kwahk and Lee (2008), who have indicated that a push for change from senior management will allow employees to become more receptive towards implementing change. These views clearly articulate a top-down, bottom-up approach to enabling change within an organisation.

The most effective way for leadership to implement change is through a combination of theories; in other words, leadership should set the direction and engage with employees (Beer and Nohria, 2000). This is evident in the graph below, which illustrates that the majority of the organisations subscribed to a top-down, bottom-up approach (Theory E&O).



Two respondents, one from the insurance industry and the other from the engineering and technology industry, summed up the importance of leadership and the involvement of employees thereof during implementation:

Human Resource Manager (R2):

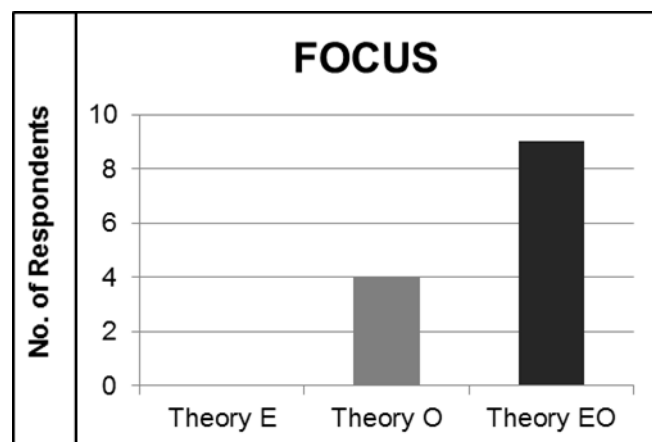
"Leadership is completely key in these initiatives; how we went about it was we got buy-in from our expert team before implementing anything... So we got buy-in from Ex-Co and we then filtered down to senior management... So our first point-of-call was to get buy-in from senior and top management and then filter it down. We got input from employees as well, so where knowledge doesn't always sit at the top, it can sit further down and we've got input from the people at all levels of the organisation that really needed to buy into the practices."

Senior Project Manager (R8):

"Foremost, if there's no leadership there's no motivation, so leadership involvement, leadership visibility is absolutely important...Absolutely because at the end of the day if you don't have buy-in from staff within to roll something out becomes much tougher...if you want something to be successfully rolled out and, let's call it expanded in the business, it's absolutely paramount that you have senior managers up to CEO level involved."

6.2.3 Focus

Guzman and Wilson (2005) indicated three barriers to knowledge transfer in organisations. Two of these factors are the social context and structural organisational factors. The social context describes knowledge transfer based on individuals' interpretation, behaviours and cognition whilst the structural organisational factors include conflicting goals within the organisation, low trust levels and human rationality. The results from the interviews, depicted below, clearly indicate that no organisation focused merely on the "hardware" when implementing knowledge management.



The majority of organisations focus both on the "hardware" and "software" when implementing knowledge management (Theory E&O). Some of the respondents indicated that both are important, but the "software" was weighted higher than "hardware".

Human Resource Manager (R2):

"What we did actually was we used the culture to leverage, so in any change management process you need it eventually to become a way that you do things,

and that's what we tried to do with the culture. So we tried to change or shift the culture so that this is just the way that we do things.”

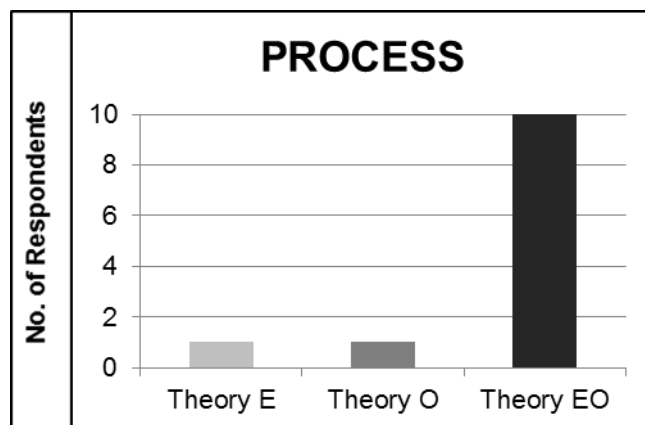
Information Management Manager (R6):

“More on the people element and on the culture element because the tools are usually the easy bit. It's the people and how they respond to the using of the tool. That's the biggest challenge. I think the change that you need to make is really how do you get people to change their paradigm from using their mailbox as a form of storage to utilising other tools for collaboration and for document management slash knowledge management.”

The sentiments shared by the respondents support the findings of Guzman and Wilson (2005) of the social and structural barriers to knowledge management implementation, as organisations are seen to becoming more proactive in developing these areas.

6.2.4 Process

Beer and Nohria (2000) have indicated that planning for a change process is a top-down, bottom-up or combined approach. It can be clearly seen that most organisations followed a combination, namely, Theory E&O approach, which allows for spontaneity and innovation during the planning process.



Knowledge Management Consultant (R10):

“The leadership kind of had a look at it, obviously I reported to him, so he saw what I was doing all the time, and he went ‘okay cool, this is good’.... yes I mean there was, there was employee inputs. That was yes, because we tried to, I mean if you want to train staff you have to engage the people.”

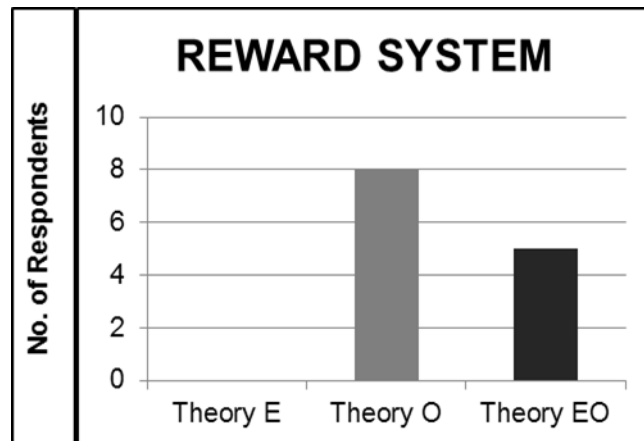
Manager_ Knowledge Management (R13):

“We did the knowledge audit. I think in a team of about 1000 we interviewed I think it was 50 or 60 people in total; we then looked at the themes that came out of what is problematic. We then kind of said okay ‘problem solution’, ‘problem solution’ for each of them. We took it to the Exco board... We said these are our 3 sub capabilities, I guess, in knowledge management and we built them, then we started targeting teams and negotiating dates for deployment.”

This indicates that the planning process did not occur in isolation from the target audience; instead, input from all facets of the business was involved in planning knowledge management implementation. This is in line with the finding of Cummings and Worley (2009), who have indicated that the process of planning entails taking employees through a journey to create a map of the initiative and engaging them in understanding the specific events and activities that should occur for this transition to succeed.

6.2.5 Reward System

Providing rewards to individuals and teams can be a very useful mechanism for encouraging people to participate in a knowledge management initiative (Bishop et al., 2008). This was supported by Kuan Yew Wong (2005), who had indicated that providing incentives assists in reinforcing positive behaviour and culture required for knowledge management implementation. Beer and Nohria (2000), however, have indicated that a combination of financial incentives and motivation through commitment is the most effective way to encourage change. The results obtained contradict the proposition of Beer and Nohria, since the majority of respondents indicated that motivation through commitment was the most effective way to reward individuals (Theory O).



Respondents 2 and 11 clearly articulated that the reward mechanism was solely to develop the organisational capability through motivation and that providing financial incentives was not sustainable in inculcating a knowledge management culture.

Human Resource Manager (R2):

“We tried to combat that by looking at talent management across all levels, so if I’m teaching you to do what I do that means that I can move on to do what that guy’s doing so and that in itself is a reward mechanism because there are promotions and accelerated development...talent management growth development training accelerated development, that sort of thing that played a key motivation factor.”

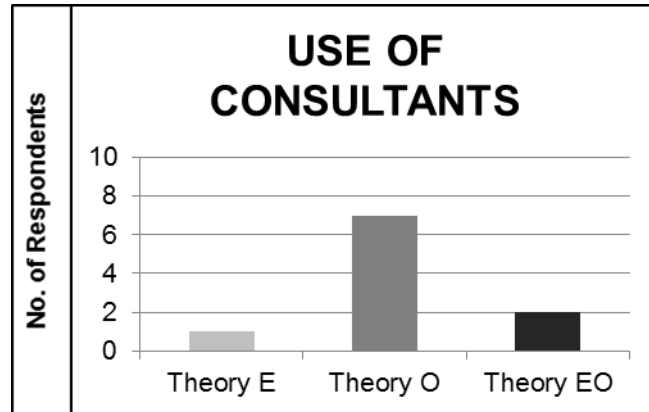
Knowledge Manager (R11):

“We haven’t really identified any reward structures and whatever because it was felt that if we always try and reward people for doing the right thing it wouldn’t be inculcated into their culture... people who were driving uptake were rewarded, but not in financial terms”.

6.2.6 Use of Consultants

Organisations see consultants as important contributors to learning when implementing change, and consultants have been highlighted as a critical success factor (Oakland & Tanner, 2007). Consultants are used as expert resources that empower employees to effectively implement change in an organisation (Beer & Nohria, 2000). This is representative of a combination of Theory E & Theory O.

The majority of respondents supported Theory O and indicated that consultants were used to create support for management towards shaping their own solution for knowledge management implementation. The results are displayed in the graph below:



Human Resource Manager (R2):

"One consultant we did use, I guess, was a strategy consultant that facilitated a strategy session right at the beginning of this process before all of this was implemented so to guide us in coming up with the strategy."

Senior Advisor – Knowledge Management (R4):

"They actually helped us with the whole assessment and then put together a strategy towards that, because what they did literally, we just had them co-ordinating and facilitating."

This finding challenges this dimension of Beer and Nohria’s strategies for change, as most organisations believe that consultants are only required to create a framework/strategy to assist in knowledge management implementation.

6.3 Conclusion to Research Question 1

The aim of incorporating Beer and Nohria’s strategies for change was to develop an understanding of the motivators for implementing change from a knowledge management perspective. Figure 6 listed the dimensions that were proposed by Beer and Nohria for implementing change.

Respondents were required to provide feedback to questions that were aligned with these dimensions in order to select the most appropriate strategy; namely, Theory E, Theory O or a combination (Theory E&O) of these. The feedback was explored and pertinent quotations of respondents were provided for each theory. An aggregate total of all responses along the six dimensions are shown in Table 7 below:

Table 7: Beer and Nohria – aggregated total

	Theory E	Theory O	Theory EO
GOALS	1	4	8
LEADERSHIP	2	3	8
FOCUS	0	4	9
PROCESS	1	1	10
REWARD SYSTEM	0	8	5
USE OF CONSULTANTS	1	7	2
TOTAL	5	27	42

In viewing the aggregate total of each strategy for change, it is evident that Theory E&O (combination) is the strategy which is subscribed to most frequently. This indicates that organisations implement knowledge management from an economic perspective as well as an organisational capability perspective.

Leadership role is of paramount importance and respondents indicated that there has to be two-way communication; namely, top-bottom and bottom-up approach. When implementing knowledge management, the focus should be on the “hard” factors (structures and systems) as well as “soft” aspects (culture) of the organisation.

There were two dimensions of change, namely: reward system and use of consultants, which did not conform to Beer and Nohria’s proposition. Respondents were more in favour of Theory O on each of these dimensions. Respondents indicated that motivation through commitment was the most utilised mechanism, and some felt that incentivising people through financial rewards is setting the wrong precedent and is not sustainable. The role that consultants played in implementing knowledge management was mainly that of planning/developing strategies.

A key insight which was made from the information is the importance of employee engagement when implementing knowledge management. Input from employees ensures their buy-in and eliminates resistance to change. Financial rewards for employees should be minimised or avoided, as this is seen as an incentive rather than a mechanism to promote doing the right thing.

6.4 Discussion of research question 2

Kotter (1995) developed eight stages for successful change management. Were all stages relevant when implementing knowledge management?

These eight steps will be discussed in sequential order:

6.4.1 Establishing a sense of urgency

Section 5.3.3 presents the findings of this stage, as recorded on a Likert scale. Ten of the thirteen respondents indicated relatively high levels of urgency were created for knowledge management implementation. People will remain at the current status quo unless they see a reason to change (Appelbaum et al., 2012). It is, therefore, important for leadership to create a sense of urgency, which will create the momentum for people to change.

Respondent 13 briefly indicated the sense of urgency that was created at their organisations: "In core banking we have got 5 as the most it was 6; they wanted it yesterday and the same is happening in the new space now, like 'come, come'. We actually can't keep up with the demand."

The findings support Kotter (1995) in indicating that establishing a sense of urgency is necessary for change implementation and it can be applied when implementing knowledge management.

6.4.2 Creating a guiding coalition

A group/team with a high level of authority in the organisation is required to provide direction during the implementation of the change process (Kotter, 1995). Leadership support was also defined as one of the critical success factors for knowledge management implementation in organisations (Bishop et al., 2008; Kuan Yew Wong, 2005).

Ten of the thirteen respondents indicated that a guiding coalition was formed, with a high level of authority which drove the implementation of knowledge management.

Human Resource Manager (R2):

“Exco team together with the people development team, so our HR team. The Exco team, from the perspective of identifying the destination and feeder roles and identifying the talent that we had to fill those roles and then what knowledge needed to be transferred and then the HR team from a facilitation, implementation perspective, so to make sure that it happened, coordinate it, to implement stuff that needed to be implemented.”

Knowledge Management Consultant (R10):

“So it was pretty much the CEO, then it was me, I had the role of the knowledge officer, and then I would work with my community practice leaders; we had a very good shared services team. We were fantastic, like everyone was in it together so it was human resources, it was marketing, it was IT, it was knowledge management; we were all in it together, resourcing and we all worked as this very, very connected team.”

Ensuring the effectiveness of a knowledge management initiative requires it to be championed by someone within the organisation who can convince members of the benefits associated with knowledge management implementation (Bishop et al., 2008). It was concluded that the majority of organisations understand the importance of a guiding coalition and this is therefore, a necessary step which supports (Kotter, 1995).

6.4.3 Developing a vision and strategy

One of the key driving forces is to develop a plan and strategy which will provide the foundation for organisations to deploy their capabilities and resources to achieve their knowledge management goals (Kuan Yew Wong, 2005). Organisations that do not have a well-structured and articulated vision will face the consequence of the transformation effort being dissolved in a series of confusing projects which can potentially take the organisation in the wrong direction (Kotter, 1995).

Ten of the thirteen interviewees indicated that their organisation had created a vision and strategy for knowledge management.

Human Resource Manager (R2):

“The vision for knowledge management is very much aligned to helping build businesses but internally focussed. So, focussed on building employees. Our internal value proposition speaks to employees taking control of their career, taking control of their learning and their development and taking initiative when it comes to that.”

Specialist Knowledge Management (R7):

"We defined knowledge management in the organisation as: to be given the right information to the right people at right time in the right context. In order to support their business strategy objectives...with a vision of entrenching knowledge and culture in the organisation."

From the responses received, it can be concluded that this step in Kotter's model is relevant and that organisations should align the vision of knowledge management with the overall business strategy. This will result in easier acceptance of knowledge management within the business.

6.4.4 Communicate the change vision

Communication plays a pivotal role when implementing change in an organisation. Through constant communication, leadership can obtain the required buy-in from their employees to enable successful implementation. Kotter (1995) indicated that the change vision should be communicated as often as possible to employees.

Respondents were requested to indicate the frequency with which the vision for knowledge management was communicated through the organisation. Nine of thirteen respondents indicated that this occurred frequently, together with the mechanisms that they used to communicate this vision.

Participant 11 indicated that through simple communication, the vision of knowledge management was spread through the organisation:

Knowledge Manager (R11):

“As often as possible...for example, during the implementation – the early implementation phase, we have a newsletter which goes out, online, every month and a hard copy which used to go out quarterly.”

Participant 13 indicated that communication occurred frequently, through Exco and board meetings, and there was a lot of visibility of knowledge management in the organisation.

Manager: Knowledge Management (R13):

“A hell of a lot. It was communicated at the various Exco and board forums it was done in the respective team meetings when an employee would join the program, they get initiated in there induction programs mentioned; then there is formal knowledge management training that happens for 2 hours. It gets mentioned there and we have communication, knowledge management bulletin that goes out once a month; we have a support data thing where ourselves and the knowledge champions and coaches are walking around on the floors between people’s desks once a month, called help and assistance.”

Communication and stakeholder support is paramount for successful change and this should be tracked and publicised as often as possible (Oakland & Tanner, 2007). It was noted that communication of the vision took place at all levels in the organisation, and this enabled buy-in from all staff. It is clear that constant communication of the vision is necessary during implementation and this is, therefore, a relevant step in Kotter’s model.

6.4.5 Empowering broad-based action

Kotter (1995) indicated that active engagement with employees and encouraging them to proactively think about non-traditional ideas, activities and actions is necessary for achieving change. Empowerment from the bottom up is vital when implementing change, as this encourages decisions to be made where the work is actually done (Oakland & Tanner, 2007). This is indicative of the end users taking responsibility for ensuring the roll-out of any change and that senior management must provide them with the appropriate level of authority during implementation. Respondents provided positive feedback towards this element, whereby 11 of the 13 respondents indicated that they were empowered to act on the vision of knowledge management.

Respondent 1 clearly articulated that employees were actively engaged in knowledge management implementation and provided input, as they were the end users. Leadership support towards this was also evident and this aligns with the literature presented above.

Learning Manager (R1):

"A lot of the training that we've done would include knowledge management systems. A lot of the courses have it. Of course they provide their input because they have to do the work, so, yes, definitely, they provide the input in terms of streamlining, making things more efficient, coming up with ways to make the environment better. Yes, all of that. I have never seen a manager, or heard a manager turn it down or say no, but they're all very much supportive of it."

Respondent 6 encapsulated the importance of empowering employees to take ownership during implementation, as they are ultimately the owners of the programme.

Information Management Manager (R6):

"They were engaged frequently: no less than two to three times a month in different shapes and forms. So the vision to implement the project was set but employees input in terms of how the implementation at their specific site, or their specific business, input was solicited from them, because obviously you can't run a large program without input of employees."

From the review provided by the various organisations, it is evident that this step in Kotter's model is relevant in achieving change. This step also coincides with Oakland and Tanner's model for successful change.

6.4.6 Generating short-term wins

Kotter (1995) indicated that organisations should plan for creating short-term wins through visible performance improvements and for rewarding employees involved in the improvements. The literature presented by Beer and Nohria (2000) supports this statement and indicates that rewards should be provided to employees through a combination of financial and motivational incentives when implementing change.

All of the respondents indicated that milestones were communicated to employees; however, not all of their organisations had reward mechanisms in place. Six of thirteen respondents indicated that they had clear milestones and rewards for achievements.

Respondent 6 clearly articulated how people were rewarded for achieving milestones and indicated that the rewards mechanism was not through financial recognition, but through "non-tangible" rewards; specifically, acknowledgement in newsletters, and so on. This clearly supports the findings in Section 6.2.5, where respondents indicated that rewards were mostly through motivation and commitment; that is, "non-tangible" rewards.

Information Management Manager (R6):

"So yes, they were definitely communicated during the project, key milestones and what needed to be done to get there. There wasn't really an award type system. I mean there was recognition of making deadlines, recognition of achieving certain key milestones. People were interviewed. People were put into newsletters, those kinds of things."

Though the various responses received, the majority subscribed to the communication of milestones and the achievement thereof, but only six respondents indicated that there is a reward mechanism in place for this achievement.

In conjunction with the discussion presented in Section 6.2.5 and the responses received around the short-term wins proposed by Kotter, the author's view is that this is an important step in the change process.

6.4.7 Consolidating change and producing more change

This stage refers to the upliftment of the change process and encouraging more change through the achievement of the aforementioned milestones. It is important that the momentum of change is maintained to ensure continuous improvement and ultimate success. Kotter (1995) indicates that through invigoration of new projects and themes, this step can be accomplished.

Respondent 4 indicated that management was involved in ensuring that lessons learnt were transferred from one project to another. This enabled employees to embrace knowledge management at their workplace, which assisted in consolidating and producing more change.

Senior Advisor – Knowledge Management (R4):

“I would really name it success in terms of the implementation because you could literally see the management was taking full accountability there in ensuring that the learnings from other projects are actually now translating into the actual practices now. I'm going to give you a simple example – XXXX project somewhere down in KZN, and how they even came to change some of the safety harnesses.”

Respondent 13's view clearly indicated that the consolidation of short-term milestones assists in producing the change required for successful knowledge management implementation.

Manager: Knowledge Management (R13):

“So right in the beginning I will be honest I did not think about communicating milestones and that is the lessons I have learned and that is what we are doing differently in the customer centre of excellence now. What we do, do now, however, is every year I set goals for each of my areas and we have a goal setting session or communication session.... you need to keep on going at it and giving feedback and helping them setting directions.”

Nine of the thirteen respondents indicated that they have some mechanism in place to consolidate the milestones achieved. This encourages more change in the organisation, from a knowledge management perspective. This stage is, therefore, necessary when implementing change from a knowledge management perspective.

6.4.8 Anchoring new approaches in culture for sustained change

Organisational culture is deemed one of the critical success factors in enabling knowledge management implementation (Kuan Yew Wong, 2005). The alignment of an individual's culture to that of the organisation is therefore, critical to ensure that individual learning is shared across the organisation. The change that is required in the organisation must become part of the new culture, at the level of the people, to ensure effectiveness and sustainability (Kotter, 1995).

Eleven of the thirteen participants indicated that they have put measures in place to ensure that knowledge management is instilled in the culture of the organisation.

Participant 2 articulated a unique approach towards instilling knowledge management in their organisational culture. They have associated it with their talent management programme, which resulted in people becoming more receptive towards it, as there were clear benefits associated with it.

Human Resource Manager (R2):

“What we're trying to do is become a learning organisation and to have different platforms to do that, so job-shadowing, info sessions, induction sessions, open door policies so you can go and ask questions, challenging projects... I think, I suppose, where we were careful with knowledge management in pegging it to **talent management because then people want to get involved because then they can understand the benefit of it.**”

Participant 13 indicated that a change management programme was created to instil knowledge management in the culture of the organisation. Leadership support and communication were imperative in ensuring that this culture was articulated among the employees.

Manager: Knowledge Management (R13):

“I think we have got a very strong focus on the change management component of driving out a cultural change...leadership has got a hell of a lot to do with it. Because you need to continuously set vision and you need to communicate progress”.

The unanimous agreement and responses received indicate that organisations have put measures in place to ensure that knowledge management is instilled in their culture; therefore, this step in Kotter’s model is required when implementing change in knowledge management.

6.4.9 Knowledge management success

All participants were requested to indicate whether the implementation of knowledge management had been a success at their organisations. Nine of thirteen respondents indicated that it had been a success.

These responses were aligned with Kotter’s model to determine how many steps were relevant for organisations that indicated that their knowledge management practice had been successful. The results presented in Table 8 below are arranged in descending order of Kotter’s steps utilised:

Table 8: Successful knowledge management and Kotter’s eight-step alignment

Respondent	KOTTER'S Eight Step Model								Do you think KM has been a success in your organisation?	No. of steps implemented
	Establishing a sense of urgency	Creating a guiding coalition	Developing a vision and strategy	Communicating the change vision	Empowering broad based action	Generating short term wins	Consolidating change and producing more change	Anchoring new approaches in cultures		
R 13	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8
R 11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8
R 10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8
R 8	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8
R 6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8
R 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8
R 5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7
R 9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5
R 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	5
R 7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
R 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4
R 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
R 12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0

The table above indicates that six of the nine respondents who indicated that knowledge management was a success had implemented all eight steps proposed by Kotter.

Respondent 13 had summed up the success by indicating that if it can work in a high-paced environment, it can work anywhere.

Manager: Knowledge Management (R13):

“Yes we have been successful in what we set out to achieve... I think we have shown credibility – we have shown that it can work in a very complex and highly fast-paced environment... and if it can work there I think it can work for the rest of the organisation with a little bit of clever thinking.”

6.5 Conclusion to Research Question 2

The aim of this research question was to determine the relevance of Kotter's eight steps of change when implementing knowledge management.

Figure 7 indicated the number of respondents who had implemented each of the changes proposed by Kotter when implementing knowledge management. The responses obtained from the various participants were explored and pertinent quotations for the relevant steps were discussed.

There was, however, a discrepancy noted in **Step 6, which is “generating short-term wins”**. Only 6 of the 13 respondents indicated that they have some form of reward mechanism in place for achieving milestones. There were two parts to this question:

- Creation of milestones; and
- Rewards for achieving these milestones.

Only six of the respondents attested to both parts in this question. It was, however, concluded that this is an important step as this question somewhat related to “rewards” as proposed in Beer and Nohria's model. It was concluded there that the majority of organisations reward their employees through “non-financial” mechanisms; see Section 6.2.5.

It was evident from Table 8, where Kotter's eight steps were aligned with organisations that viewed their knowledge management practices as successful, that all eight steps are required to ensure successful knowledge management implementation.

Chapter 7: Conclusion

7.1 Introduction

Chapter 6 discussed the findings within the context of existing knowledge management and change management literature. This chapter will briefly review the background of this particular research problem and the objectives that were specified at the onset of the research. The main findings will be summarised in order to outline various recommendations for businesses. Limitations to this research will also be provided, along with recommendations for future research. This chapter will end with a conclusion to the entire research report.

7.2 Research background and objectives

The business environment has identified knowledge management as a source of potential competitiveness. The business communities are under constant pressure to ensure that knowledge is utilised optimally; therefore, there is a need for them to develop effective knowledge management practices (Bishop et al., 2008).

During knowledge management implementation, organisations have focused mainly on IT tools. It has been eluded to that understanding of the human side must be incorporated during implementation (Bishop et al., 2008). Employees' commitment and participation towards knowledge management initiatives is imperative for successful implementation, and this requires change in their individual thinking and behaviour (Rusly et al., 2011). For this reason, it can be advocated that a change management programme is required to support knowledge management implementation in organisations.

The objective of this research was, therefore, to identify the change strategies that organisations undertake when implementing knowledge management and to highlight the relevance of Kotter's change management framework during knowledge management implementation. This was achieved through 13 semi-structured interviews with knowledge management practitioners, or their equivalent, at 12 different organisations.

7.3 Findings

Two research questions were explored, and the findings were presented in Chapter 5. Prior to the interviewees' engagement in the change management initiatives, the author requested that they comment on the knowledge management practices utilised within their organisations. Table 6 provided a list of all of these practices. "Documents and records management", "collaboration tools (SharePoint)", "lessons learnt" and "communities of practices" are the most utilised mediums for knowledge management. There is a greater focus on explicit knowledge management practices than on tacit knowledge management practices.

7.3.1 Research Question 1

This research question analysed whether Theory E, Theory O or a combination (Theory E&O) was a more dominant strategy for change when implementing knowledge management. Beer and Nohria, (2000) indicated that through a combination of the two theories, namely, Theory E&O, organisations can satisfy their shareholders and build viable institutions through their employees, simultaneously.

Table 7 presented the aggregated data from the interviews. Theory E&O (combination) was the strategy which was incorporated most by organisations. This is in alignment with the conclusions that Beer and Nohria presented.

There were two dimensions of change, specifically, "reward system" and "use of consultants", that did not conform to Beer and Nohria's proposition. Respondents were more in favour of Theory O on each of these dimensions. They indicated that motivation through commitment was the most utilised mechanism, and some felt that incentivising people through financial rewards sets the wrong precedent and that it is not sustainable.

The role that consultants played in implementing knowledge management was mostly that of planning/developing strategies.

The most important lesson from the information gathered relates to employee engagement when implementing knowledge management: Organisations should strive to ensure that employees are involved from the beginning, and should obtain their input as far as is practically possible. This will encourage buy-in and limit resistance to change.

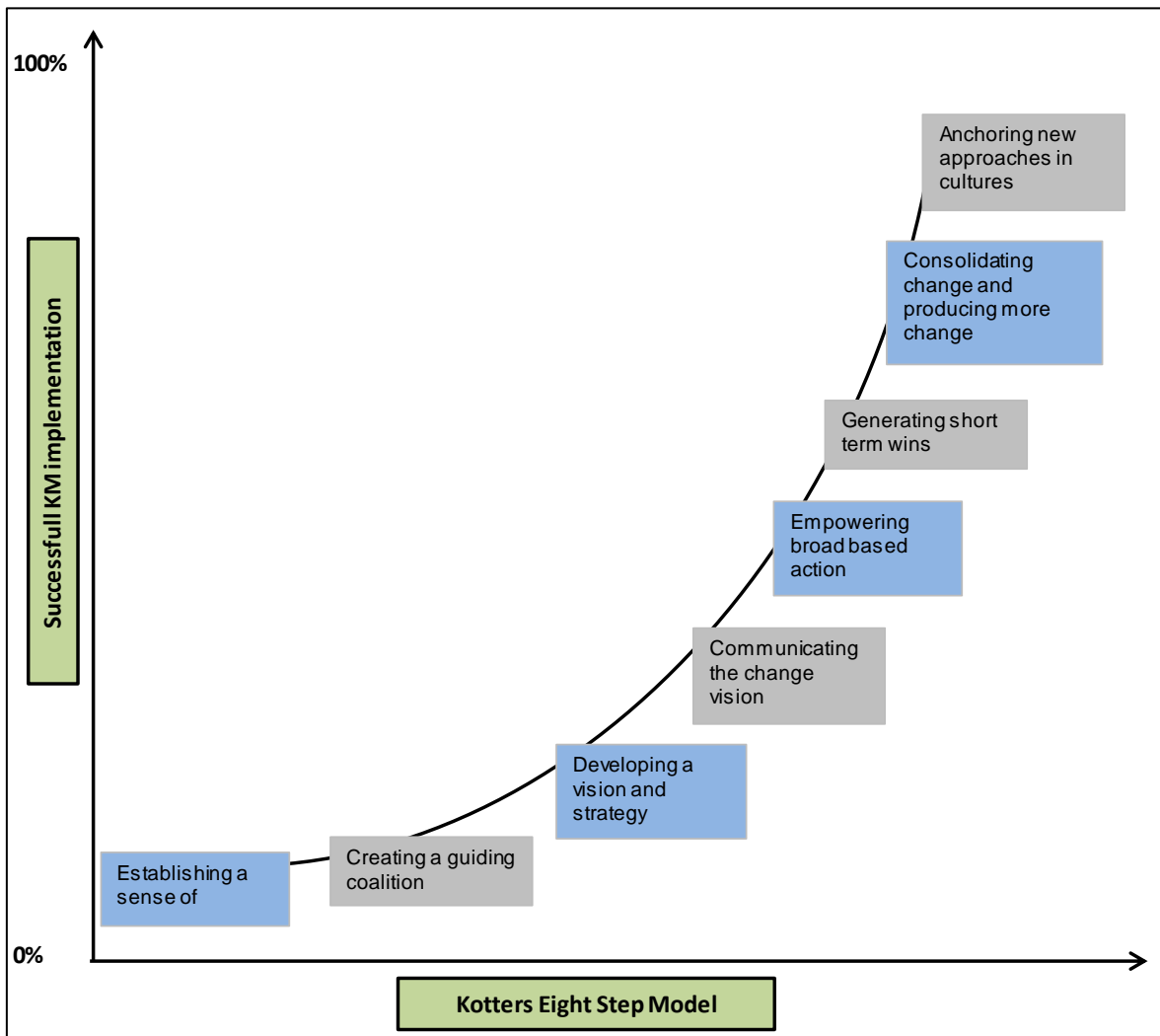
Financial rewards for employees should be minimised or avoided, as this is seen as incentivising the wrong behaviour. Consultants should be brought into the project only to assist in defining a strategy for knowledge management implementation, as this will ensure that the end users take full responsibility and ownership.

7.3.2 Research Question 2

Research Question 2 focussed on the relevance of Kotter's change management model in the implementation of knowledge management in organisations. The results presented in Figure 7 provide an indication of the number of respondents who had undertaken each step in the process. Through the analysis of the findings presented in Chapter 6, it was concluded that all steps that Kotter proposed are necessary for knowledge management implementation.

Table 8 presented the number of steps that organisations utilised during implementation. Nine of the thirteen organisations interviewed indicated that knowledge management was a success; however, not all organisations utilised each step. In addition, the findings indicated that organisations which utilised all steps were relatively more confident in stating that their initiative was successful. Figure 9 below illustrates that as more of Kotter's eight steps are implemented during knowledge management implementation, the chance of successful implementation increases.

Figure 9: Kotter's eight steps and successful knowledge management implementation



7.4 Recommendations to stakeholders

A number of recommendations have been presented through this research. The literature in Chapter 2 identified the critical success factors and barriers towards knowledge management implementation. The research revealed that these critical success factors strongly relate to change management.

Leadership was identified as one of the critical success factors when implementing any change initiative. The role that leadership plays in the initiation of projects can easily determine whether a project is a success or failure. It is, however, recommended that a strong team be created; in other words, a guiding coalition for the implementation of knowledge management. This team should also have constant interaction with end

users; that is to say, a top-bottom and bottom-up approach. This obtains end user buy-in and encourages change.

Many organisations employ consultants to analyse, develop and roll out knowledge management in their organisations. It was determined, however, that for knowledge management implementation to be successful, consultants, if required, should only provide a strategy/framework for knowledge management implementation. The employees in the organisations should take responsibility for rolling out the programme. This has the benefit of creating end user acceptance as well as ensuring buy-in from most organisational members.

Motivating people through rewards has always been a contentious issue. It was advocated in literature that a reward mechanism is a critical success factor in knowledge management implementation. It was discovered, though, that rewards were mostly through non-financial mechanisms. It is recommended that organisations take heed of this finding and encourage the right behaviour through non-financial mechanisms.

When implementing knowledge management in an organisation, cognisance should be taken of the change initiatives required to ensure its success. Kotter's eight-step change management framework provides a useful guideline for implementing this change; and the greater the number of steps implemented, the greater the chance of successful knowledge management implementation.

7.5 Limitation of the Research

As with other research projects, this report has inherent limitations. These must be acknowledged, as they can potentially constrain the outcomes. The first limitation of this project was that it was based on a qualitative analysis. The findings presented above can only be applied to theories and not towards a population. It is recommended that further quantitative analysis be conducted to test the findings obtained.

The organisations that are represented in the sample include organisations that are represented in the author's MBA 2013/14 class. This eliminates other organisations that have implemented knowledge management. This was limited further, as the

organisations that participated were all located in Gauteng; hence, the finding cannot be generalised towards all organisations in South Africa.

The change management models utilised in this study were Kotter's eight-step change framework as well as Beer and Nohria's change strategies. The interview schedules and responses received were biased towards these models.

The interviewees who participated could potentially bias the information such that the responses which they provided always positioned their organisation in good standing.

The translation of the results that was received could affect the validity of the research, as the responses were seen only through the lenses of the interviewer.

7.6 Recommendations for future research

There is a growth in the field of knowledge management, as organisations are becoming more aware of the benefits that can be realised if successfully implemented. Through reviewing the literature presented in this report and the findings that have been attained, the list below provides some future research recommendations:

- This study was conducted through a qualitative approach and limited to organisations based in Gauteng. A future study can investigate the impact that these two models have on organisations throughout South Africa. This can further validate the findings obtained.
- Explicit knowledge management tools are the most extensively utilised tools for knowledge management. An investigation into the possible inhibitors of implementing mechanisms for tacit knowledge retention in organisations can provide insight into the body of knowledge for knowledge management.
- The literature indicated that organisations can gain a competitive advantage if they successfully implement knowledge management. Future research into the actual realised benefits from knowledge management could encourage businesses to commit to investment in this field in the future.
- The research can be extended to include models other than Kotter's. Determine which change strategy is best suited to organisations in South Africa/which models have seen the most success among organisations.

7.7 Conclusion to research

As the economic landscape becomes more competitive, organisations are looking for key sources of competitive advantage (Arntzen Bechina and Ndlela, 2009). Knowledge management has been advocated as one of the programmes which organisations can implement in order to obtain this competitive advantage. This study explored the change management initiatives that organisations undertake when implementing knowledge management.

Various critical success factors for knowledge management implementation were identified. These factors were analysed and aligned towards change management initiatives that organisations must undertake when implementing knowledge management.

These change initiatives were explored using Beer and Nohria's strategies for change and Kotter's eight-step change management framework. The findings revealed that Beer and Nohria's strategy for change, namely, Theory E&O (combination), is the most common strategy, overall, when implementing knowledge management. However, there were two dimensions of change, specifically, rewards and use of consultants, which strayed from this theory. Organisations should, however, take cognisance of this when developing strategies for knowledge management implementation.

The results revealed that all eight steps of Kotter's model are relevant when implementing knowledge management. It was concluded that as the number of steps implemented increases, the success of the knowledge management initiative increases.

Organisations should take cognisance of these findings in order to develop a more robust strategy and implementation plan when executing knowledge management initiatives.

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Annexure 1: Interview schedule

Precursor Statement

“Organisations implement changes within their processes in response to changes within the business environment. These changes could be for pure economic reasons i.e. to improve the bottom line of the organisation, to improve the organisational capability or it can be done to achieve both. Within these next set of questions, I would like to understand the motivators for change as well how it was implemented within your organisation”

1. What are the knowledge management practices that your organisation has implemented to retain tacit and explicit knowledge?

2. Can you describe the main goal/motivation for implementing knowledge management in your organisation?

3. Leadership plays a pivotal role when any solution is developed and rolled out in an organisation. Can you describe the role leadership portrayed when implementing knowledge management and indicate whether employees contributed towards the goal and target setting for KM implementation.

4. Did the change associated with knowledge management implementation focus on the “hardware” (organisational processes and systems) or the “software” (organisational culture, behaviour and attitude) or a bit of both? Explain?

5. Can you describe the process used for planning knowledge management implementation?

6. Can you describe the reward mechanism utilised to motivate the implementation of KM?

7. Can you describe the role of consultants in implementing KM?

8. Can you rate the level of urgency that was created by the organisations leadership for knowledge management implementation?

No urgency		Urgent		Overwhelming urgency
1	2	3	4	5

9. Can you describe the group/team that was formed to champion knowledge management implementation?

10. Can you describe the vision and strategy your organisation developed for implementing KM?

11. How often was the vision for knowledge management communicated to employees?

12. How often were employees engaged towards understanding the knowledge management effort and where they involved in providing input towards its implementation?

13. Where there specific milestones communicated for the implementation or progress of KM, and how where people rewarded for achieving these milestones?

14. Did the achievement of the aforementioned milestones encourage employees to embrace knowledge management in their working environment?

15. What are the measures that have been put forth to ensure that KM practices are instilled within the culture of your organisation?

16. Do you think that knowledge management has been a success in your organisation? Explain.

Annexure 2: Ethical clearance

**Gordon Institute
of Business Science**
University of Pretoria

Dear Mr Arvin Lankesar

Protocol Number: **Temp2014-00218**

Title: **Change Initiatives for Knowledge Management Implementation**

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards,

Adele Bekker

Annexure 3: Consent statement

Consent Statement

Title: Change Initiatives for Knowledge Management Implementation in Organisations

I am currently studying towards my Master of Business Administration (MBA) degree at the Gordon Institute of Business Science, University of Pretoria. I am conducting research to identify *the change initiatives for knowledge management implementation in organisations*. This interview will enable me to understand the change management practises that have been embarked within your organisation when implementing knowledge management. This interview is expected to last approximately one hour. *Your participation is voluntary and you can withdraw at any time without penalty.*

All data that will be collected will be kept confidential. If you have any concerns, please contact me or my supervisor. Our details are listed below.

Researcher Name: Arvin Lankesar
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Supervisor Name: Roy Page-Shipp
Email: roy@pageshipp.co.za
Phone: 082 447 6289

Researcher Name

Signature

Date

Participants Name

Signature

Date