

UNIVERSITY OF KWAZULU-NATAL

THE APPLICATION OF KNOWLEDGE  
MANAGEMENT PRACTICES IN  
PUBLIC SERVICE ORGANIZATIONS

BY

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## **ABSTRACT**

Knowledge management is a powerful tool that ensures that government functions in an effective and efficient manner thus upholding professional and highly productive capable public service. It is viewed by many as a strategic resource that can be applied in all government operations to preserve organizational memory, and also as an organizational asset for enhancement of service delivery. As a result, the recognition of knowledge management by public service as a strategic resource will result in government achieving its goals and objectives, furthermore ensuring that government departments achieve improved performance and quality in service delivery. However, the implementation of knowledge management in the Public Service has progressed without an agreement on a framework of standards, systems and commonly accepted definitions and terms. This resulting in inadequate access to and sharing of organizational knowledge as a strategic resource for achieving organizational goals thus posing a strategic risk in the respective organizations. This has contributed to challenges on clarity of the knowledge management concept affecting amongst others, modalities of implementation in the public service, consequently leading to weak integration of knowledge management with the institutional functioning process. The aim of this study was to determine whether application of knowledge management has succeeded in driving service delivery efficiency in the Western Cape Government Department of Transport and Public Works and National Treasury. The qualitative research was employed for this study using semi structured interviews as a data collection instrument. The study used purposive sampling with twelve respondents inclusive of operational staff, middle, senior and executive management representatives from both departments. The findings revealed that knowledge management is a process that entails gathering, creating, classifying, saving and disseminating knowledge so as to create organizational memory and learning organizations. Key to this process is the human capital involved. The findings also point out leadership buy-in and support, culture of sharing and availability of technological platforms as key drivers for successful implementation of knowledge management. It is recommended that knowledge management be defined in the context of government in line with the mandate of government on service delivery which is outlined in the National Development Plan.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Introduction**

Knowledge management (KM) is a process that involves activities such as collating, sharing, packaging, dissemination and use of knowledge in decision-making and to enhance the processes as well as efficiency of service delivery within the organization. KM is about managing the knowledge transfer process, which will lead to a continuous renewal and strengthening of tacit and explicit knowledge for organizational efficiency and effectiveness.

### **1.2 Background**

Knowledge management is a powerful tool that ensures that government functions in an effective and efficient manner thus upholding a professional and highly productive capable public service (National Planning Commission, 2013 & Republic of South Africa, Outcome12, 2010). Within government, the Minister of Public Service and Administration is responsible for establishing uniform norms and standards which support an improved efficiency and effective public service delivery in line with Section 3 of the Public Service Act, 1994, as amended. The implementation of KM in the public service has progressed without an agreement on a framework of standards, systems and commonly accepted definitions and terms (DPSA Knowledge Management Framework, 2017). This has contributed to challenges on clarity of the KM concept and this affects amongst others, modalities of implementation in the public service, consequently leading to weak integration of KM with the institutional functioning process.

The National Treasury (NT) and the Department of Transport and Public Works (DTPW) in the Western Cape Government were been chosen for this study as they have instigated implementing KM in their organizations in an attempt to ensure that it becomes an integral part of day-to-day

operations for organizational effectiveness. The DTPW is responsible for providing services to both government departments in the province and to the citizenry. The NT is responsible for managing South Africa's national government finances whilst supporting efficient and sustainable public financial management central to the promotion of economic development, good governance, social progress and a rising standard of living for all South Africans. Both these departments in their different mandates are responsible for ensuring effective and efficient service delivery. The government departments which the two departments chosen for the study are part of, have over years not been able to sustain continuous improvement detriment to the loss of institutional memory, resulting in costly interventions on service delivery. The inadequate access to and sharing of organizational knowledge as strategic resource for achieving organizational goals has also posed a strategic risk in these organizations. Furthermore, the lack of integrated systematic coordination of knowledge in the government organizations led to weak integration of KM. Therefore, leveraging on knowledge in these departments is crucial. KM as system used to collect (from current and past public servants) and store information which can be accessed and used by public servants to resolve current and future challenges key to these departments.

### **1.3 Aim of the study**

The aim of this study was to determine how the application of KM has succeeded in driving service delivery efficiency in the selected departments.

### **1.4 Focus of the study**

The research sought to determine how the application of KM has effectively succeeded in driving service delivery efficiency in both the Department of Transport and Public Works (DTPW) in the Western Cape Government and the National Treasury (NT). The research appraises the consequence of KM when it is entrenched in these organization.

## **1.5 The research problem**

Government departments are major generators of data and information, however due to absence of agreement on a framework of standards, systems and commonly accepted definitions and terms, there has been a challenge of managing knowledge in a consistent manner (i.e. collated, stored and accessible) so as to enhance service delivery (DPSA National Knowledge Management Framework, 2017). This results in inadequate access to and sharing of organizational knowledge as strategic resource for achieving organizational goals which poses a strategic risk in the respective organizations.

Furthermore, knowledge has become the key factor of what government does, such that, jobs created are now knowledge demanding rather than low skill and repetitive, making innovation one of the most essential tasks of government. However, the absence of coordination has resulted in government utilizing consultants to perform crucial functions on its behalf with no return on investment in as far as skills transfer and knowledge retention is concerned. The loss of organizational memory results in costly interventions on service delivery.

This research study intends to determine the role KM plays in attaining efficiency in these organizations which will result in improved service delivery. The study looked at strategies that the selected organizations have applied/adopted in order to ensure that KM is recognized as an organizational asset for enhancement of service delivery. The study will also explore factors that promote successful implementation of KM within the Western Cape Department of Transport and Public Works and the National Treasury.

## **1.6 Research objectives**

The objective of the study is to investigate the application of KM in public service organizations. This was done by looking at the following issues:

- a) To determine the effect of KM on organizational efficiency in public service organizations;
- b) To explore the factors that affect the successful implementation of KM in public service organizations;
- c) To assess the extent to which the factors affect the implementation of KM in public service organizations;
- d) To provide recommendations on how public service organizations can manage knowledge effectively.

### **1.7 Research questions**

- a) What is the effect of KM on organizational efficiency in public service organizations?
- b) What are the factors affecting the successful implementation of KM in public service organizations?
- c) To what extent do the factor affect the implementation of KM in public service organizations?
- d) What recommendations can be made towards effective implementation of KM in public service organizations?

### **1.8 Significance of the study**

The study was intended to assist the public service in realizing KM as a strategic resource that can be applied in all its operations to preserve organizational memory, and also as an organizational asset for enhancement of service delivery. It also explored the key factors that promote successful implementation of KM thus ensuring an effective and efficient public service that provides services in a cost-effective manner. Furthermore the study sought to enrich the body of knowledge around

the subject of KM by discovering other factors that can be exploited in order to make sure that knowledge harvested is shared, stored and accessible for future use.

## **1.9 Methodology**

The method that the researcher engaged for this study was the qualitative. The reason for using qualitative instead of quantitative methodology is because it is regarded as the best method to use in exploring detailed information through discussions with the people involved in the research subject area. This is supported by Cooper and Schindler (2008) when they state that qualitative research assists with in-depth understanding of the area being explored. The researcher used an exploratory case study research design in order to elicit in-depth detail information on the identified organizations. The data was collected through in-depth interviews. The sampling in this study involved interviews with the senior managers, middle managers and operational staff in the DTPW and NT. The sample was constituted of ten participants, identified on the basis of their expertise and experience of the subject investigated. The data gathered from the interviews was analysed and various themes identified based on the responses given by the different respondents.

## **1.10 Structure of the study**

### **1.10.1 The research problem**

Government departments are major generators of data and information, however, due to absence of agreement on a framework of standards, systems and commonly accepted definitions and terms, there has been a challenge of managing knowledge in a consistent manner (i.e. collated, stored and accessible) so as to enhance service delivery (DPSA National Knowledge Management Framework, 2017). This results in inadequate access to and sharing of organizational knowledge as strategic resource for achieving organizational goals which poses a strategic risk in the respective organizations.

Furthermore, knowledge has become the key factor of what government does, such that, jobs created are now knowledge demanding rather than low skill and repetitive, making innovation one of the most essential tasks of government. However, the absence of coordination has resulted in government utilizing consultants to perform crucial functions on its behalf with no return on investment in as far as skills transfer and knowledge retention is concerned. The loss of organizational memory results in costly interventions on service delivery.

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### **1.10.2 Chapter 1 – Introduction**

This chapter introduces the study's aim, background, research problem significance and research methodology espoused for the study outline, the research questions to be answered and also to inform on the limitation of the study.

### **1.10.3 Chapter 2 – Literature review**

This chapter expounds on literature related to the study focusing on knowledge management, its effect on organizational efficiency in public service organizations as well as the factors affecting the successful implementation of KM and their effect on knowledge management. Furthermore the literature review articulates the research study.

#### **1.10.4 Chapter 3 – Research design and methodology**

This chapter engages on research design and methodology adopted for this study. It also focuses on the research design, sampling method, data collection method, data analysis, validity and reliability, limitation and ethical consideration.

#### **1.10.5 Chapter 4 – Research findings and discussions**

This chapter presents the key findings on the research study done through interviews with participants from both the National and Provincial Departments selected for the study, i.e. the National Treasury and the Department of Transport and Public Works (Western Cape Government). It also discusses in detail the findings of the study in conjunction with the previous research done in order to make a meaningful contribution to the field of knowledge management.

#### **1.10.6 Chapter 5 – Research conclusion and recommendation**

This section ties up the objectives with the findings and brings closure to the research questions by providing evidence that show how the research questions have been answered. It also provides recommendations that will benefit the Public sector, whilst highlighting limitations identified in the study and outlining solutions to overcome these in future studies. In conclusion the researcher indicates whether the study was able to answer or find solutions to the research problem.

### **1.11 Conclusion**

This chapter, as the first chapter of the research, gives a framework on the study through the presented introduction, background of the study, its aim, the focus of the study and the research problem. These are supported by the research objectives and questions and the significance of study undertaken. The subsequent chapter, chapter two, appraises the literature that is significant to the objectives and questions that the study sought to respond to, thus providing context to the study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The previous chapter introduced the study by presenting the background as well as developing objectives and questions that guide the study. This chapter presents literature related to the study, focusing on knowledge management, its effect on organizational efficiency in public service organizations as well as the factors affecting the successful implementation of knowledge management and their effect on knowledge management. Furthermore the literature review will facilitate articulating the research study.

#### **2.2 Knowledge management**

Knowledge in organizations is the resource asset that is utilised by employees in order to meet organizational objectives (Durst & Wilhelm, 2010, cited in Mkhize, 2015). This resource asset enables the organization to utilize its knowledge whether tacit, explicit or implicit for the purpose of sustainability, innovation and competitiveness. It is further viewed as a ‘strategic asset’ and the basis for organizational competitiveness (Bergeron, 2003). Therefore organizations invest in KM in order to advance its performance (Shieh, 2012). Additionally, Storey and Barnett, cited in Dayan, Heisig and Matos (2017) and Ramohlale (2014), argue that knowledge is considered as a strategic resource, hence the need for it to be managed in order to support the competitive performance of the organization. However, according to Bessick and Naicker (2013) this knowledge exists within the employees and is a key competitive factor for organizations that wish to be and remain competitive in the marketplace. Gurteen (1998), cited in Yew Wong and Aspinwall (2005: 64), defines KM as “an emerging set of organizational design and operational principles, processes, organizational structures, applications and technologies that help knowledge workers dramatically leverage their creativity and ability to deliver business value to the customer and the organization can get business competitiveness and potential operation.”

The key driver of organization development is the acquisition and retention of its competitive advantage through knowledge (Lapiņa, Maurāne & Stariņeca, 2013). It is therefore imperative that this resource is retained and shared to increase productivity. According to the public service productivity management framework (2017: 13) productivity is defined as “the creation of citizen satisfaction through the generation and application of knowledge and skills by public servants to produce quality products and/or provide quality services which are accessible to all and that meet the quality needs and standards of the citizens and are consistent with their social, environmental and economic goals.” The knowledge in the public service is both tacit and explicit, and mainly entrenched not only in documents but also in organizational processes, practices, norms and culture (Omotayo, 2015). Paliszkievicz, Svanadze and Jikia (2017) concurs when stating that the culture of the organization plays a significant role in influencing the business performance.

Innovation means the process of converting an idea, generated through research and development, into a new or improved product, process or approach which relates to the real needs of society and which involves scientific, technological, organizational or commercial activities (NACI Act 55 of 1997). Mulgan and Albury (2003) define innovation as the creation and implementation of new processes, methodologies, models, products, services and methods of delivery which result in significant improvements in outcomes efficiency, effectiveness or quality for the benefit of citizens.

As the global world enter Fourth Industrial Revolution, organizations are compelled to focus on managing and leveraging their knowledge as a core competence for learning, in order to offer quality services in a cost-effective manner. In 2013 the South African Government adopted its first National Development Plan (NDP) that demonstrated government's commitment to building a capable and developmental state, central to it is a capable, effective and efficient public service (National Planning Commission, 2013). This requires well-run and effectively coordinated state government institutions run by skilled public servants who are devoted to delivering consistently good high-quality services for all South Africans. This can only be done through the effective management of the public service knowledge, backed up by the citizenry who have confidence in the state, thus strengthening the state's effectiveness towards the delivery of service. Since the

adoption of this plan, government is under pressure to ensure professional capabilities in the management echelon, that is invigorated by an emphasis on improved effectiveness and efficiency in the public service, of which KM is fundamental (Chaston, 2012). It is therefore critical to provide opportunities for sharing of experiences, practices and methodologies in the public sector organizations to ensure knowledge retention and facilitation of organizational learning. So far the public service still battles to see the value of KM as it is practiced in multiple and different approaches without following the systematic processes of KM. Inaccessibility of knowledge in government results in frustrations around implementation and execution of projects, which justifies the significance for the learning and KM intervention in the public sector organizations to ensure that its intellectual capital is managed as a critical asset. The public service for the purpose of this dissertation is perceived as a learning organization.

### **2.3 Organizational efficiency**

According to Mihaiu, Opreana and Cristescu (2010) efficiency is measuring the “relationship between the effects or outputs ... and efforts or inputs.” However, they caution that “identifying and measuring inputs and outputs in the public sector is generally a difficult process. The difficulty of measuring the efficiency in the public sector is largely caused by the inability to quantify accurately the effects (outputs) because they are direct but also indirect due to the externalities which they generate, but also due to the clear and accurate non-statement of the objectives.”

With regards to the public sector, the efficiency gives emphasis on the relationship between the economic and social benefit of implementing the program. As an example, when services are delivered in a cost-effective manner (Mihaiu, Opreana & Cristescu, 2010). The economic benefit focuses on value of providing the services versus the social benefit which is meeting the expectation of the service recipient and even more. It is therefore safe to say that efficiency in the public sector is a measure of how government performs within a limited budget and time frame. Ramohlale (2015) argues that the efficiency and effectiveness of an organization in the knowledge economy if facilitated by organizational ability to adjust within the change brought about by the

increase in the effectiveness of a process that results in an increase in output for organizational competitiveness. Efficiency in government means the realisation of the need for transformation, and this can be accomplished through effective use of knowledge. The use of knowledge by the public sector for efficient and effective service delivery is possible through KM entrenchment as a strategic resource. This study will also expound on the importance of the application of KM in the public service for productivity and innovation.

## **2.4 The knowledge management effect on organizational efficiency in public service organizations**

### **2.4.1 Knowledge management for improved performance and productivity**

In this competitive information age, government needs to keep abreast with effective and efficient mechanisms that will facilitate improved service delivery in real time inspired by knowledge. According to Dalkir (2005) the application of organizational knowledge combined with the individual knowledge in the organization enables the organization to compete effectively and efficiently as the organizational competitiveness solely relies on the organizational ability to respond timeously to the environmental and organizational changes expedited by organizational skills and learning abilities of the knowledge workers. However, Ramohlale (2014) states that organizational survival is highly dependent on its ability to create and disseminate knowledge that is key for organizational performance. Furthermore, Badimo and Buckley (2014) accentuates the role of people and knowledge in facilitating improved organizational performance and high service quality. Therefore, it is apparent that for government departments to achieve improved performance and quality in service delivery, the effective use of organizational knowledge by employees plays a significant role. KM is also about organizations seeking to acquire or create potentially useful knowledge and to make it available to those who can use it at a time and place that is appropriate for them to achieve maximum effect in order to improve organizational performance. Cong and Pandya (2003) states that knowledge management in governments reinforces efficiency and effectiveness of its operations, equipping them for the competitive world through acquisition and dissemination of knowledge. Furthermore, Chang and Lin (2015) reiterate

the fact that effective management of knowledge within the organization results in improved organizational effectiveness, efficiency innovation and customer service.

According to Omotayo (2015) the effective management of knowledge as “critical ingredient” for organizations in facilitating viable strategic competitive advantage is essential for organizational efficiency. Badimo and Buckley (2014), from their study conducted on the South African healthcare system with regards to improving KM practices is of the view that government departments are confronted with insignificant improvement on performance, service delivery, making informed decision, and harvesting intellectual capital from the outgoing employees. This is a true reflection of how KM enhances government performance and is key for effective decision-making. The knowledge generated in the public service is key for decision-making and for learning in order to avoid repetition of errors and bad practices and has to be disseminated for application. It enables the departments to continually improve performance and productivity in an attempt to promote innovation. Paliszkievicz, Svanadze and Jikia (2017) concur by stating that the value of knowledge acquired by organizations can only be recognized when disseminated and applied for business continuity, thus ensuring efficiency and productivity. However Cong and Pandya (2003) is of the view that government still struggle to appreciate value of knowledge, therefore implementation thereof is still a challenge, thus the need for a generic KM framework that will enhance organizational efficiency to be developed.

Knowledge has become the primary factor of what government does. Jobs created are now knowledge intensive rather than low skilled and repetitive, making innovation one of the most important tasks of government. This is concurred by Butler and Murphy, cited in Mbhalati (2014), where they state that government entities and its employees are well-equipped knowledge workers due to the environment they work in, thus making KM the future of government success. Furthermore, Gracia *et al.*, 2001 quoted in Schmitz, Rebelo, Gracia, and Tomás (2014) state that the capability of organizations to manage knowledge is the basis of innovation. Subsequently, knowledge as a strategic resource, has the capacity to improve organizational performance by simplifying the business processes thus enhancing innovation (Kogut & Zander, 1992; Grant (1996), cited in Chang and Lin, 2015). It is against this background that KM is regarded as a

process that affords and enables an organization an opportunity to improve its performance by facilitating learning and innovation whilst solving its problems for efficient service (Mavodza and Ngulube, 2013).

#### **2.4.2 Knowledge management for innovation**

Knowledge management strives to ensure the ability to continually improve performance through new ideas, knowledge and insights, thus practicing continuous improvement of best practices to drive incremental innovation and productivity that will result in public service excellence. South Africa, as a developing country, has to invest in its knowledge accumulated over years to ensure that new knowledge is created in government in order to promote innovation that will facilitate the competitive global standard on service delivery. Mkhize (2015) concurs when he states that for organizations to meet the global economic demands empowerment through the upskilling of employees is key to stimulate innovation and transformation. Furthermore Ramohle (2014) concurs when by indicating that where knowledge management has been adopted innovation has improved attributable to enriched collaboration, enhanced communication, improved employee skills. Perez-Soltero and Soto (2017) are also of the view that a culture promoting collaboration enhances professional and personal development which makes provision for the creation of innovative ideas across the organizations. However, Omerzel and Gulev (2011) and Urbancova (2013) reckon that in order for organizations to attain innovation and competitiveness they should have the ability to use knowledge as strategic resource effectively. Mothe, Nguyen-Thi, and Nguyen-Van (2015) agree by stating that the ability to apply organizational knowledge effectively for innovation is the basis of organizational competitiveness. It is evident that innovation is influenced by knowledge creation and organizational learning, as a result there is need for government to invest in this practice to ensure that proper mechanisms are employed to facilitate knowledge harvesting, retention, transfer and access. This is supported by Donate and De Pablo (2015) when they conclude that the success of enhanced innovation is apparent when new knowledge content created from research and development is converted into efficient processes, marketable products and services. The only way that these knowledge created can be converted is when it is shared through collaborative efforts allowing the flow of knowledge and transfer of

competence within a group of workers in an organization (Perez-Soltero and Soto *et al.*, 2015). The improved business process and service delivery in the public service can only be experienced when the knowledge created is shared between employees or across departments allowing for capitalisation on the new knowledge, resulting in innovation and productivity (Dikotla, Mahlatji & Makgahlela, 2014).

If organizations still want to remain relevant due to the global economics changes they are compelled to come up with, competitive practices that can result in innovative solutions and KM is that practice (Xerri & Brunetto cited in Perez-Soltero & Soto, 2017). Government departments, as major generator of public service knowledge through their research and analysis done in an endeavour to improve service delivery, has to prioritise leveraging on its knowledge to promote innovation before going outside, looking for assistance. Donate and De Pablo (2015) acknowledge in their study the competitive advantage of organizations where existing knowledge is exploited through KM practices such as knowledge transfer, application and dissemination for enhanced performance as key in promoting innovation. It is therefore key that the public service integrate KM practices in its business processes in order to attain a global standard. Mothe *et al.* (2015) agree when they state that the effective management of knowledge has a progressive effect on organizational performance advanced by processes such as the implementation of best practices, purposeful integration and innovation. Information, Communication and Technology (ICT) can play a role in enabling retention, sharing and dissemination of knowledge created to ensure accessibility and also for continuous improvement. Mavodza and Ngulube (2013) alludes by stating the importance of a system in an organization that will facilitate knowledge sharing and transfer if the knowledge acquired is to be of value to the organization for innovation. Furthermore, Becerra-Fernandez and Sabherwal (2014) echoes that the knowledge sharing system allows the organization to organise and share both explicit and tacit knowledge so that it is accessible beyond the exit of knowledge sources in the organization, so it serves as support for knowledge sharing and dissemination. ICT in government should serve as a platform and enabler for the departments to leverage on critical relevant organizational knowledge for innovation and not as the primary tool for managing knowledge.

### **2.4.3 Knowledge management processes and organizational learning**

Literature expound how knowledge management processes facilitate organizational competence through creation, storage, retrieval, transfer, and application of knowledge. Furthermore, research has appreciated that central to learning is knowledge, thus recognizing the importance of KM for organizational performance and competency (Villar, Alegre & Pla-Barber, 2014; Alavi & Denford, cited in Easterby-Smith & Lyles, 201). According to Villar *et al.* (2014), KM processes and organizational learning are key elements for organizational learning capability and performance. However, Mavodza and Ngulube (2013) state that KM is about increasing the use of organizational knowledge through sound practices of KM and organizational learning that entails capturing, acquisition, retention and dissemination of knowledge within the organization. Therefore, from the theory above it is clear that there is a general belief that an organization can increase and improve its efficiency through promoting effective KM processes (King, 2009). The effective management of public service knowledge is critical for government to deal strategically with the challenges presented by the knowledge economy in order to improve competitiveness of the public sector.

Learning as technique that results in conversion of knowledge, beliefs and behaviour underpins the organizational performance and innovativeness, and this technique is key for public service effectiveness and efficiency in delivering services (Shieh, 2012). Yusoff (2005) claims that there is a need for the public sector's effective and efficient response towards complex recent environmental demands and for it to adopt an open and flexible way of working, relaxing its bureaucratic traditions consequentially allowing for continuous learning. He further defines learning organizations as the ones that ensure that its employees are developed to their full potential through learning processes for improve organizational performance.

Dewah (2015) attests when he states that a learning organization is the one that empowers employees with operational knowledge that assists organizations in achieving its objectives when retained. A learning organizations provide opportunities for sharing of experiences, practices and methodologies to ensure knowledge retention and facilitate organizational learning and the public

service ought to be a learning organization. Furthermore, Dewah (2015) states that the intent by the organization to improve its service delivery is evident through its vigorous participation in the learning of its employees. One of the significant mandates of public service in South Africa is to provide services to the citizenry in an effective and efficient manner, therefore continuous learning is vital to improve business processes, resulting in productivity.

In addition, Yusoff (2005) is of the view that competency in the public sector can be improved through KM that will facilitate customer satisfaction through collaborative learning and sharing public service knowledge and experiences for improved service delivery. Kanuka and Garrison, cited in Mkhize (2015), claim that transfer and creation of skills and knowledge in learning organization is enhanced through collaborative learning that supports critical thinking. Knowledge management is directly associated with learning as it is a practice that promotes sharing. It has been observed through literature that in organizations where knowledge sharing is not a custom, employees become only owners which poses a risk of loss of a valuable government asset – public sector knowledge. It is therefore critical that the public sector improve its ability to learn, unlearn and relearn for effective functions and innovation (Yusoff, 2005).

Knowledge management in the modern organizations has expanded due to its ability to enhance organizational effectiveness and efficiency when properly implemented (Mbhalati, 2014). The role of KM in the public service is to provide strategic support through relevant information that is applicable for problem solving. Most problems are experienced at an operational level and knowledge sharing becomes key as this is one level of the organization where productivity is derived. Nesheim and Smith (2015) concur by recognizing that essence of knowledge sharing as an important element of KM as it allows for transfer of individual learning for organizational competence. This is substantiated by Dalkir (2005) when he refers to the brainstorming gathering in the organization as where employees come together to share experience which mainly is tacit in nature. Beyond the quest for achieving organizational goals, KM facilitates the process of identifying, sharing and creation of new critical knowledge and re-utilisation of existing knowledge which is key to organizational learning and its efficiency (Dewah & Mutula, 2014; Nouri, Mousavi & Soltani 2016). The public service, through implementing proper KM processes,

can improve business processes and whereby an increase in efficient service delivery can be ensured.

Culture determines organizational effectiveness and efficiency (Brajer-Marczak, 2016 and Omotayo, 2015). Knowledge creation is one of the essential elements for organizational survival and mainly it is the human process that is enabled through technology. As a result organizations concentrate on it for improved business processes, operations and innovative products. Government can also benefit from the knowledge created over years for business continuity, as a result there is a need for it to be documented and stored for retrieval. It is therefore pivotal for public service to have its knowledge stored and organised in way that it is accessible for innovative use.

Organizational culture plays a key role in ensuring that KM processes are implemented for facilitating the transfer of knowledge that results in learning (Chang & Lin, 2015). This is supported by Sharma & Sharma (2010) when they echo that workmanship behaviour is influenced by the organizational culture thus encourages effectiveness and efficiency in job performance. Government operates under complex situations and the challenges that are faced by the public service are multifaceted therefore requiring alternative solutions that can only be acquired through learning expedited by the process of knowledge transfer through sharing of information to fast track service delivery. Organizational learning allows organizations to harvest knowledge that enhances productivity and innovation when retained (Dewah & Mutula, 2014). The modern South African public service has an obligation to develop skills and knowledge to be able to meet its economic and societal needs, moreover the knowledge generated over time ought to assist government in ensuring efficiency (National Planning Commission, 2013). According to Shieh (2012: 105) “without effective organizational learning and KM aligned to strategic needs of the organization there is no learning organization”. It is evident from this statement that for government to be regarded as a learning organization, it is imperative that it has effective KM to enrich learning.

## **2.5 Factors affecting the successful implementation of knowledge management and their effect on knowledge management**

Knowledge management is a systematic process which is utilized by an organization for competitiveness. It is characterised by knowledge sharing and organizational learning that results in increased performance and productivity. Organizations that realize the advantage and the value of knowledge through creating, sharing management and utilization of this key knowledge enjoy the optimum performance and productivity (Omotayo, 2015). However, Cong and Pandya (2003) claim that organizations that manage knowledge in a systematic way allow for increase of KM benefits in both individuals and organizations, which is still a challenge in the public service. The process of KM is characterized by creation, transfer, storage, retrieval and application and re-use of knowledge. Khamis *et al.* (2014) allude to this when they state that KM is a process that enhances organizational skills and practices through sharing of knowledge with other people within the organization. Furthermore, Mavodza and Ngulube (2013) argue that KM is a process that affords and enables an organization an opportunity to improve its performance by facilitating learning and innovation whilst resolving its challenges solving its problems. However, where knowledge sharing is not a custom, employees become only owners of the knowledge posing a risk of losing this valuable asset (Bessick & Naicker, 2013). Cong and Pandya (2003), further echo the fact that knowledge acquisition and dissemination in the organizations is key for effective functioning; it is for this reason that effective KM is key in government departments. Girard and McIntyre (2010), cited in Bessick and Naicker (2013), suggest that there are several factors that ensures successful implementation of KM in an organization including leadership, culture, roles and responsibilities, information technology infrastructure and measurement. Other key factors include creation of a learning organization, knowledge harvesting, knowledge retention and dissemination of organizational memory.

### **2.5.1 Organizational learning**

Public service is characterised by its principles of good governance and KM supports these by facilitating a free flow of knowledge exchange for organizational learning and planning. (Dewah

& Mutula, 2014). Public service employees are knowledge workers and government, by its very nature, is a knowledge-based organization that uses knowledge for service delivery planning, decision-making, policy-making and regulatory framework development. These knowledge workers exploit both tacit and explicit knowledge in order to achieve government objectives, subsequently KM in government is key for knowledge retention. Furthermore, Organizational learning as a process that is advanced through learning when knowledge is transferred from an individual to the group of employees in the organization is pivotal in government in ensuring an effective and efficient public service. This process assists with the processing and understanding of organizational information enabled by the organizational culture (Schmitz, Rebelo, Gracia & Tomás, 2014). This is substantiated by Rijal (2010) when he states that the complexities in which organizations operate under, influenced by the environment, necessitates for a change towards a learning organization. Furthermore, Villar, Alegre and Pla-Barber (2014) alludes to the fact that KM and learning processes are key factor for attaining long-term competitive advantage and for international success and government have to have these in place in order to have sustainable effective and efficient service delivery. Learning processes will afford government an opportunity to exploit existing knowledge that allows for the consolidation of all knowledge that has been acquired over time and exploration of new knowledge through sharing as part of learning that will result in innovation (Villar *et al.*, 2014).

Government's primary objective is to provide improved services to the citizens and the knowledge accumulated in all projects undertaken is key to facilitate continuous improvement therefore it has to be retained. In all learning organizations employees are furnished with operational knowledge that, if retained, can be beneficial to the organization leading to improved service delivery (Dewah, 2015). Furthermore, a learning organization promotes learning acquisition, therefore the need for the public service to be a learning organization in order to work smart and innovative.

Lawler & Sillitoe (2013) define organizational learning as key component for business continuity and reflection. Government departments always embark on several project to ensure improved service delivery since it has been the priority of public sector, however an element of reflection that still leaves much to be desired thus far (Badimo & Buckley, 2014). This poses a question on

whether the lack of or the challenges on the quality and speed of delivery of services has been reviewed by reflecting on what has been done and challenges thereof in order to facilitate continuous improvement. Organizational learning is mainly influenced mostly by organizational culture. This is confirmed by Lawler and Sillitoe (2013) when they state the importance of a deep rooted learning culture for the facilitation of skills development in employees to enable them to identify, solve and learn from challenges encountered as complexities arises. Organizational learning allows for harvesting of tacit knowledge to ensure it is accessible for organizational usage to ensure its survival and growth from lessons learnt in previous challenges experience by organizations (Rudawska, 2013). Shieh (2012) agrees when he states that organizational learning allows for new knowledge to be generated or improvement on the existing for business continuity. Organizational learning facilitates the improvement of organizational knowledge as organizational knowledge is the result of learning that expedite innovation, therefore it is important in government for improved services (Rudawska, 2013). The Public service has to ensure that its structure and processes facilitate organizational learning as a key factor for KM implementation and a mechanism to enhance continuous improvement on service delivery.

### **2.5.2 Knowledge acquisition and retention**

Knowledge management affords organizations an ability to acquire information and arrange it properly for easy access and re-use to expedite productivity and innovation (Khamis, Suliman & Mohezar, 2014). The process of gaining new knowledge and identifying existing critical knowledge for organizational gain is perceived as knowledge acquisition, this can be from both internal and external sources (Paliszkiewicz *et al.*, 2017). In the public service internal sources will be the business processes and from employees with expertise and experience within the department, whereas external sources will be through collaboration with other departments, the citizens or directly engaging with the policy owners (Paliszkiewicz *et al.*, 2017). The results from other studies performed on the impact of KM on job satisfaction recognise that knowledge acquisition has a huge effect on job satisfaction as it allows the employees to utilise the new knowledge acquired to perform in an efficient manner, as a result there is a need for managers to implement KM activities for increased performance and productivity (Kianto, Vanhala &

Heilmann, 2016). A knowledge acquisition strategy ought to be in place in the public service as critical element for knowledge retention in order to ensure that increased performance is possible. However, a knowledge acquisition strategy need to be developed if the knowledge acquisition has to be significant for KM in government as skills and knowledge is not static and becomes outdated quickly as new and current knowledge is explored for advancement in organizations. Government has to have a knowledge acquisition strategy in place for it to be able to discover, structure, organize and retain the existing knowledge for learning to facilitate effective, efficient innovative delivery of services.

Government departments are major generators of data, information and knowledge for service delivery, therefore there is a need for the government departments to have systems in place to support the creation, transfer and application of this knowledge across the organization (Alavi & Leidner (2001), cited in Chang and Lin (2015). Learning organizations are defined by knowledge sharing system that supports the sharing and re-use of both individual and organizational knowledge (Becerra-Fernandez & Sabherwal, 2014). Knowledge retention is a process that ensure that critical knowledge of the organization's operations is shared and accessible beyond the exit of knowledge source/experts in the organization to ensure sustainability through efficient and effective processes for government departments to achieve its goals (Bessick & Naicker, 2013; Becerra-Fernandez & Sabherwal, 2014). The ability of organizations to apply business knowledge for organizational enhancement serves as an important linkage of organizational goals and KM programs therefore emphasise how KM is beneficial for the organization (Omotaya, 2015). Furthermore, the transfer and sharing of knowledge becomes key as it ensure that the organizational intellectual capital remains within the organization. In the public sector employees are empowered through effective training thereby ensuring a shared understanding of basic principles that enables employees to develop a knowledgebase, subsequent allowing for a learning environment where knowledge exchange takes place as challenges and quick wins are discussed (National Planning Commission, 2013). Cong and Pandya (2003) confirm by stating that the key knowledge of the organizations is the knowledge that lies with the employees and also found in documents that are key for effective operations of organizations, hence the need to have all this knowledge captured and retained for futuristic use. Moreover, knowledge retention is a process of

KM that ensures that organizations retain its intellectual capital which is knowledge that has been acquired by its organization's knowledge workers as they exit the organization (Agarwal & Islam, 2015). This process is reinforced by the key elements of KM which are people, culture processes and systems to ensure dissemination. The public service still struggles in this regards, as a result its employees come back as consultants to provide the government with services utilizing the same knowledge acquired during the time of employment. Therefore, the importance of the retention of knowledge is evident when an organization is able to facilitate the capture and transfer of both formal and informal knowledge through knowledge networking, thereby, using the available intellectual capital to its advantage for organizational competitiveness (Mavodza & Ngulube, 2013).

Organizational memory is the most essential part of organizational growth. Without documented and accessible organizational memory the organization cannot systematically utilize its available critical resources to achieve its objectives, thus the organization can be wasting its time and resources re-inventing the wheel in solving problems that have already been experienced. Becerra-Fernandez and Sabherwal (2014) suggest that organizational memory is a combination of both explicit and tacit knowledge that is not necessarily documented yet is referenced and key to organizational operations for competitiveness. Dewah and Mutula (2014) claim that the effective management of both the tacit and explicit knowledge for knowledge retention in the public sector is pivotal as it facilitates corporate governances which ensures that the mandate of government is fortified. Government departments can benefit a lot from its organizational memory that has been generated over the years thereby cutting cost and enabling innovation and productivity. Lockwood and Ansari (1999), cited in Bessick and Naicker 2013, suggests that knowledge retention has to do with protecting organizational knowledge utilizing the KM processes of acquisition, storage and retrieval, therefore the documentation and storage of organizational memory in government is key. Mavodza and Ngulube (2013) concur, stating that through the process of KM the application and integration of tacit and explicit knowledge is promoted since it incorporates both the management of people and of organizational information. This is evident in the work of Linh-Chi (2012: 78), where he outlines that KM is defined as “the explicit control and management of knowledge within

an organization aimed at achieving the company's objectives". Therefore, critical knowledge in government has to be retained to ensure sustainability, effectiveness and productivity.

In resolving some of the complexities that our government is faced with today and delivering services in a faster and more efficient manner, the knowledge base of the previous project is thus necessary to assist in ensuring that previously tried and tested methods are revisited in order to take an informed decision on the way forward. Voronchuk & Starineca (2014) support this by stating that the decision-making process is influenced by organizational knowledge for organizational advancement and is associated with learning as it is a practice that promotes sharing. Khamis *et al.* (2014) and Brajer-Marczak (2016) further attest that KM enables organizations to acquire, store and organize information for accessibility and re-use. Knowledge management as a critical strategic resource for the organization affords the organization a key foundation for enhancing performance for competitiveness through knowledge retention and public service ought to invest in knowledge retention mechanism.

### **2.5.3 Knowledge management and organizational culture**

Knowledge is a primary factor of government which makes learning and innovation one of its most important tasks. As such, the culture of government needs to be flexible and adaptive to survive the information era that we are in (Rijal, 2010). The organizational culture ought to be established in such a manner that it reinforces continuous improvement consequently enhancing performance and job quality for improved service delivery (Sharma & Sharma, 2010). Knowledge management processes highlight the importance of knowledge creation, sharing and its application through interactive collaborations within a conducive organizational culture for organizational advancement, making it imperious for organizations to facilitate this supportive culture (Chang & Lin, 2015). Consequently, it is imperative for government departments to provide opportunities for sharing of experiences, practices, methodologies to ensure knowledge is retained so as to facilitate organizational learning in public service organizations and this is possible within a conducive culture. Alavi and Leidner, cited in Paliszkievicz *et al.*, 2017, allude by stating that

only in environments where well-informed or experienced people collaboratively share knowledge openly, knowledge exchange can take place successfully.

Leadership in a learning organization ought to be flexible, inspire strong culture, encourage innovation and be advantageous in the organization. It is also imperative in facilitating a positive culture where personnel is well acquainted and share in the organizational vision, mission and core values (Yusoff, 2005). Therefore organizations need to be innovative to survive in this changing environment. Zennouche and Zhang (2014) argue that for organizations to attain high performance goals, leadership and organizational culture should be seen as an integral constituents for competitiveness to enhance innovation. The organizational culture should demonstrate features of ‘accountability, collaboration, decentralized leadership, alignment and adaptability to remain productive (Sharma & Sharma, 2010). According to Jończyk (2014) the culture in organizations has an effect on the level at which innovation is inspired. In his study, he further exploits the four categories of organizational culture which are power, role, task and person. The government culture is bureaucratic in nature which is its role, meaning that its emphasis is on rules, procedures of actions and responsibilities that which public servants should adhere to as a result of placing position above behaviour, consequently limiting opportunities for innovation (Dewah & Mutula, 2014).

#### **2.5.4 Knowledge leadership**

Leadership is a process of influencing individuals and guiding others towards desired goals and is imperative for management of knowledge in the public service. It has been thought of by many researchers as one of the factors affecting organizational advancements (Muchiri & Kiambati, 2015). However, Sharma and Sharma (2010) is of the view that leadership is a proficiency skill and interpersonal mechanism of envisaging, setting targets and inspiring your subordinates to buy into your vision without feeling being compelled to facilitate effectiveness, efficiency and innovation in the organization. Therefore, leadership in the public service has a critical role to play in promoting a positive culture that encourages shared beliefs and values within the organization

to support information flow as a key component of knowledge management. Leadership is a significant asset in the organization that promotes cooperative efforts and inspires performance towards achieving shared organizational objectives, thereby promoting efficiency (Yukl, 2012; Gelard, Boroumand & Mohammadi, 2014; Micić, 2015). Furthermore, Leithwood *et al.*, cited by Mas-Machuca (2014), define the role of leadership as one that ensures improved learning. For this reasons the public service ought to encourage leadership that supports learning. Subsequently, Micić (2015) further states that the role of leadership in organizational learning is to promote a culture of acquiring, creating, sharing and usage of new knowledge. Therefore, KM practices are dependent on the leadership's attitude to facilitate and promote learning for improvement and advancement in the organizations, this is no different in government (Villar, Alegre & Pla-Barber, 2014). As a result, leaders in the public service ought to engage employees in a culture of learning in order to ensure effective and efficient delivery of services (Mas-Machuca, 2014).

In KM-driven organizations, leadership style is significant for organizational behaviour that facilitates learning and sharing and is also important for organizational success (Gerald *et al.*, 2014). Sharma and Sharma (2010) is of the view that a visionary leadership style is key in the facilitation of transformation and performance for the organization's competitive advantage. On the other hand the transformational leadership style promotes an organizational culture that encourages organizational effectiveness, and therefore the relationship between organizational culture and leadership is key for organizational performance. The public service, in its endeavour of promoting a positive culture that enhances the free flow of knowledge and increased productivity, has to invest in effective leadership that will drive KM initiatives.

Effective public leadership according to Muthien (2014) is both democratic, capable and able to put together operations that are characterised by high performance and supported by an effective organizational culture. The leadership in both the political and administration spheres of public service, as the knowledge generating sector, is significant in ensuring that the environment of government departments is conducive for learning, and promotes the culture that enables knowledge transfer. Dewah and Mutula (2014) argues that KM does not seem to be considered as significant by leadership within the public sector organizations in sub-Saharan Africa which

includes South Africa. This in their view is substantiated by the lack of empowering legislation that promotes knowledge sharing and retention. Knowledge retained in the individual's mind according to Alvani and Leidner, cited in Mkhize (2015), does not add value to organizational success if it is not shared within the organization. As a result shared knowledge enables the organization to gain a competitive edge and improves productivity. Therefore, there is a need for policies in government that promotes knowledge sharing and retention for enhanced collaboration, effective service delivery and innovation.

## **2.6 Theoretical framework/relevant theory**

The study draws from the theories on knowledge management. There are various models that support the strategies on knowledge Management. The following are the theories that have been taken into consideration that substantiate that the application of KM is key in organizational effectiveness and efficiency for improved service delivery.

### **2.6.1 The Von Krogh and Roos model of organizational epistemology**

This is the model that according to Dalkir (2005) separates individual knowledge and social knowledge through the factual study of the scope and nature of organizational KM known as the epistemological approach. In the Von Krogh & Roos (1998) model knowledge resides in the individuals within the organization and at social level through interaction which translate to sharing. The approach used here is connectionism that is adamant that there can be knowledge without the 'knower'. This concepts strengthens the need to sustain relationships between the tacit and explicit knowledge. In the test done in 1998 by Krogh, Roos, and Kleine on the KM in organizations it was found that there are mainly five factors that delay/obstruct the management of knowledge that would result in innovation, competitiveness and achievement of organizational goals. These are the mind-set of the individuals, communication in the organization, the organizational structure, the relationship between the members, and the management of human resources (Dalkir, 2005). Therefore, it is key that organizations put in place KM strategies that will

facilitate knowledge transfer within the organization through various mechanism. “The connectionist approach appears to be the more appropriate one for underpinning a theoretical model of knowledge management, especially owing to the fact that the linkage between knowledge and those who “absorb” and make use of the knowledge is viewed as an unbreakable bond” (Dalkir, 2005).

### **2.6.2 The Nonaka and Takeuchi knowledge spiral model**

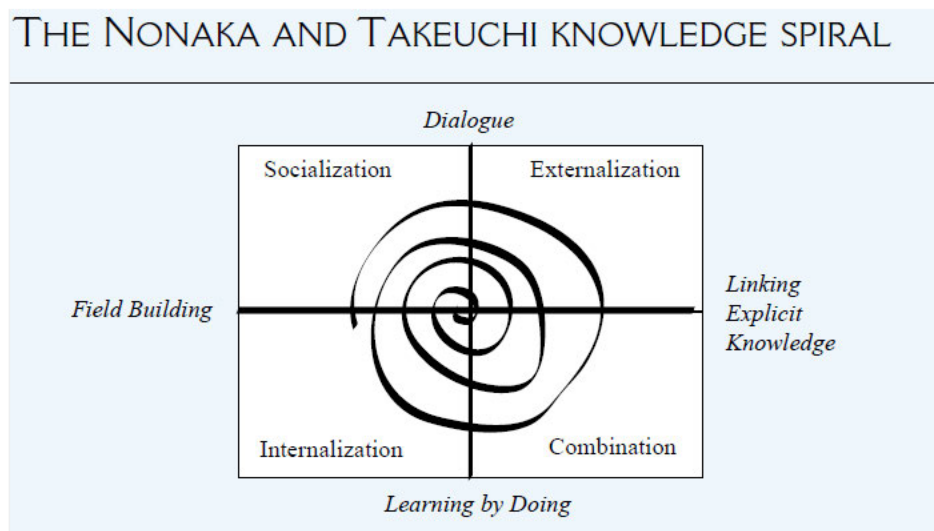
The Nonaka and Takeuchi model (1995) is a foundation of knowledge creation and transfer. They identify four processes in which knowledge can be converted demonstrating how knowledge is created and shared within an organization. These are as follows:

- i. **Socialization: Tacit to tacit.** This a process where knowledge is shared. Dalkir (2005) refer to socialisation as the environment where face-face knowledge sharing takes place. This process involves interactions that allows for sharing of knowledge through sharing of mental models, brainstorming of new ideas, sharing of experience through observation, imitation mentoring, apprenticeship and guidance.
- ii. **Externalization: Tacit to explicit.** This is a process that concretise the tacit knowledge converting it to explicit knowledge. According to Frost (2012) the externalisation process is considered difficult and an important conversion mechanism. Tacit knowledge in this process is converted into tangible permanent explicit knowledge that can be accessible and shared with others and leveraged upon by the organization even when the knowledge owner/originator has exited that organizational system (Dalkir, 2005).
- iii. **Combination: Explicit to explicit.** This a simple process of connecting and comparing explicit knowledge in an attempt to create new informed knowledge.
- iv. **Internalization: Explicit to tacit.** This is the process that underpins learning in an organization. This is a process where experience is shared from an explicit source and internalised by a learner in a manner that allows them to expand on the tacit knowledge that facilitates a new, improved way of performance.

### 2.6.2.1 Knowledge spiral

Knowledge creation is not a chronological process, it depends on a continuous and active interaction between tacit and explicit knowledge throughout the four quadrants (Frost, 2012). The knowledge spiral as indicated in figure (2.1) displays how organizations articulate, organize and arrange individual tacit knowledge. Organizations develop tools and models to create and share knowledge. The knowledge spiral is an uninterrupted activity of knowledge flow, sharing, and exchange by individuals, communities, and the organization itself.

The two steps in the knowledge spiral that are the most difficult are those involving a change in the type of knowledge, namely, *externalization*, which converts tacit into explicit knowledge, and *internalization*, which converts.



**Source:** Nonaka and Takeuchi, 1995, p.71, cited in Dalkir, 2005, p.57

Figure 2. 1 Knowledge Spiral

According to Dalkir (2005) Nonaka and Takeuchi are of the view that for knowledge creation to take place in both individuals and organizations there should be an enabling condition and the enabling conditions are alluded to as follows:

- *Autonomy*: condition whereby individuals act autonomously, according to the “minimum critical specification” principle, and are involved in cross-functional self-organized teams.
- *Fluctuation and Creative Chaos*: condition that stimulates the interaction between the organization and the external environment and/or creates fluctuations and breakdowns by means of creative chaos or strategic equivocality.
- *Redundancy*: existence of information that goes beyond the immediate operational requirements of organizational members, competing multiple teams on the same issue and strategic rotation of personnel.
- *Requisite Variety*: internal diversity to match the variety and complexity of the environment, and to provide everyone in the organization with the fastest access to the broadest variety of necessary information, flat and flexible organizational structure interlinked with effective information networks.

### **2.6.3 The Choo sense-making KM model**

This is one model that focuses on three distinct KM areas in relation to organizational knowledge. This model focuses mainly on sense making, knowledge creation and decision making. These areas are established from other models and concepts in the area of knowledge management. Dalkir (2005) highlights that relevant knowledge in this model is identified from the information gathered to understand the changes in the world the organizations in operate under and what can be absorbed to facilitate organization for competitive gain.

#### **a) Sense making**

The organization is trying to understand the information coming in from its external environment and try to deduce it into a meaningful and valuable asset for organizational enhancement. Organizational priorities are used to sift through information needed.

#### **b) Knowledge creation**

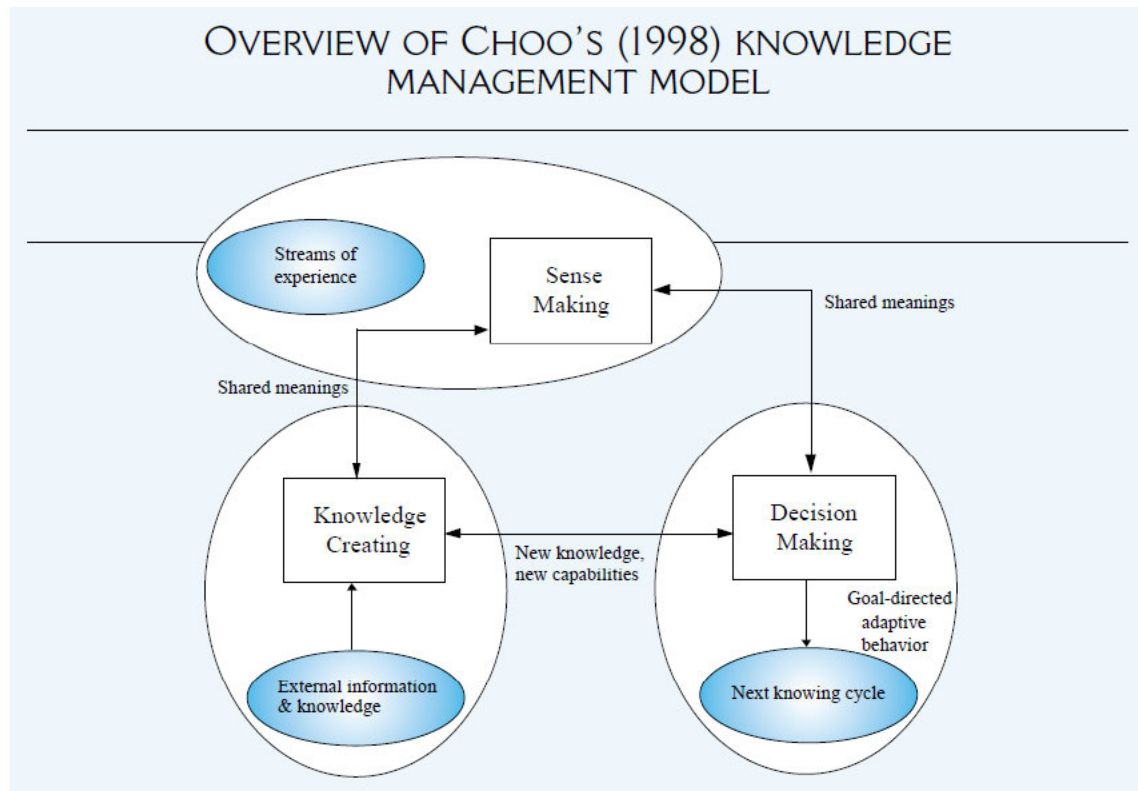
Knowledge creation is a process that allows an organization to create or harvest and disseminate knowledge in order to facilitate innovation within the organization to enhance organizational knowledge. This is derived from the KM model by Nonaka and Takeuchi that focuses on

knowledge conversion. This knowledge enables organizations to upskill and improve competence and enhance service delivery or improve performance.

Dalkir (2005) regards this phase as a transformation phase of personal knowledge amongst employees through dialogue, knowledge sharing and storytelling. This is one phase that is based on what people know and what ought to be done which is the organizational goal or objective. This is the phase that facilitate the organizational capability to make informed decisions with the usage of new knowledge and improved competency that will expedite innovative strategies for strategic decision. (Dalkir, 2005).

### **c) Decision making**

Dalkir (2005: 60) states that “Decision making is situated in rational decision making models that are used to identify and evaluate alternatives by processing the information and knowledge collected to date.” This is a phase where organizations choose with the help of new knowledge created on how its competitiveness will be achieved and innovation enhanced for increased productivity as indicated in figure (2.2).



Source: Dalkir, 2005, p.59

Figure 2. 2 The Choo Sense-Making KM Model (1998)

#### 2.6.4 The Wiig model for building and using knowledge

Wiig in his model highlights the value of organising knowledge to make it useful and valuable. The emphasis here is that knowledge arrangement and storage should be according to the priority of its value to the organization that is what it is used for. The following are the dimensions consider by the model in line with its usefulness:

##### a) Completeness

This dimension addresses the question of how much relevant knowledge is available from the source (Dalkir, 2005). The sources spoken of varies from a knowledge base to human minds which can be tacit or explicit knowledge. The completeness is not defined by the availability or existence, however the fact that someone knows it is available and where it can be found make it complete.

b) Connectedness

This dimension looks at the relations between the knowledge base. Dalkir (2005) argues that the higher the level of interconnection indicates the value of the knowledge to the organization.

c) Congruent

This dimension looks into the consistency in the concepts, values, perspectives and relations between knowledge base.

d) Perspective and purpose

This is a dimension on how we view or understand something from a specific view point due to the knowledge we possess thus we then organize it as per how we perceive it in relation to its importance and purpose.

#### **2.6.4.1 Wiig KM model on internalisation**

Wiig KM model tries to explain different levels of knowledge internalisation as indicated in Table 2.1. According to Dalkir (2005) this can be looked at as the enhancement of Nonaka and Takeuchi's process of internalisation. These levels are as follows: novice, beginner, competent, expert, and master.

## WIIG KM MODEL—DEGREES OF INTERNALIZATION

Level	Type	Description
1	Novice	Barely aware or not aware of the knowledge and how it can be used.
2	Beginner	Knows that the knowledge exists and where to get it but cannot reason with it.
3	Competent	Knows about the knowledge, can use and reason with the knowledge given external knowledge bases such as documents and people to help.
4	Expert	Knows the knowledge, holds the knowledge in memory, understands where it applies, reasons with it without any outside help.
5	Master	Internalizes the knowledge fully, has a deep understanding with full integration into values, judgments, and consequences of using that knowledge.

Source: Dalkir, 2005, p.64

Table 2. 1 Wiig KM Model – Degrees of Internalization

Furthermore Wiig categorises knowledge into three different levels namely:

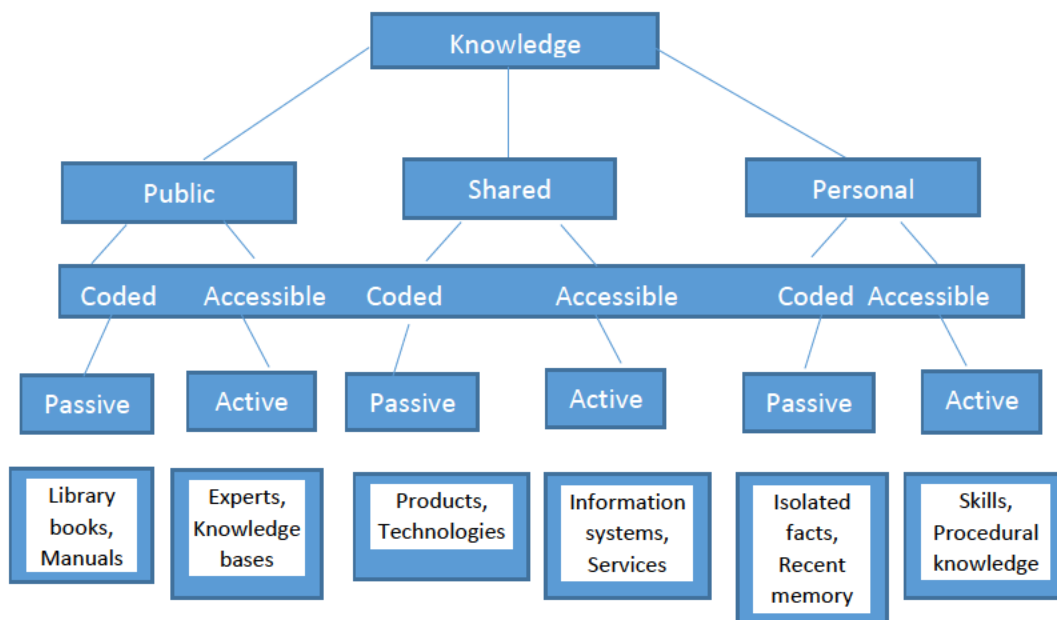
- a) Public knowledge – This is explicit knowledge that can be shared and for the public domain.
- b) Shared expertise – This is technical knowledge shared among the knowledge workers that is key for organizational enhancement and innovation.
- c) Personal knowledge – This is tacit knowledge only available to the knower and used to perform day to day tasks intuitively.

Wiig, in addition to the three levels of knowledge, further classifies knowledge into four types namely: factual knowledge, conceptual knowledge, expectational knowledge and methodological knowledge.

- Factual knowledge is the knowledge that deals with data and measurement. It is observable and verifiable with ease;

- Conceptual knowledge is the knowledge that has to do with systems, concepts and perspectives;
- Expectational knowledge is knowledge based on intuition that determines our judgement and expectation, and
- Methodological knowledge is the knowledge that contributes to how we reason, make decisions and strategies and this is mainly based on past experience.

The knowledge levels and types contributes to the matrix of Wiig mode and the hierarchy that assist the practitioners with the adoption of a KM approach based on the type of knowledge at hand that will enable them to manage knowledge effectively (Dalkir, 2005).



Source: Dalkir, 2005, p.65

Figure 2. 3 Wiig Hierarchy of Knowledge Form

## 2.7 Conclusion

Chapter two defined KM and organizational efficiency. In an attempt to support the investigations, knowledge management's effect on organizational efficiency in public service organizations was

explored in relation to what the literature expounds in relation to KM for improved performance and productivity, KM for innovation and KM processes and organizational learning. Furthermore, literature that expounds on factors affecting the successful implementation of KM and their effect on KM namely organizational learning, knowledge acquisition and retention, KM and organizational culture and leadership which are key factors for successful implementation of KM. Various theoretical frameworks that support the study were looked into. The following chapter, chapter 3, will expound on research design and methodology, data collection and analysis methods.

## **CHAPTER 3**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

The previous chapter was mainly focusing on the literature review on knowledge management. This chapter will be concentrating on the research methodology followed in conducting the study. The purpose of the study is to determine how the application of KM has succeeded in driving service delivery efficiency in the following government departments: Transport and Public Works (Western Cape Government) and National Treasury (National Government). The nature of research engaged in this study was exploratory in nature as it allows the researcher to take heed on what the participants had to say, therefore making sense of their experience. This chapter will be inclusive of the research design, sampling method, data collection method, data analysis, validity and reliability, limitation and ethical consideration.

#### **3.2 Aim of the study**

Exploratory research was used to determine whether the application of KM has succeeded in driving service delivery efficiency in both the Department of Transport and Public Work (Western Cape Government) and National Treasury (National Government). The study investigated the effect of KM on organizational efficiency in public service organizations and the factors that affect the effective implementation of KM in the public service organizations chosen as case studies. The qualitative research methodology was employed in this study in order to collect rich information that assisted in enhancing the understanding of the problem under study through semi-structured interviews, which involves open-ended questions through in-depth interviews that is used for eliciting views and opinions as a data collection method.

### **3.3 Research paradigm**

Research paradigm outlines the world view that will give direction to the research (Saunders, Lewis, & Thornhill, 2009). There are different perspectives that the business research draws from in order to understand and interpret the problem addressed in research and these are positivism, constructionism, critical realism and pragmatism (Sekaran & Bougie, 2016).

#### **a) Positivism**

This is a deductive approach that focuses on factual knowledge that has been derived through experimental design that allows for the testing of the cause and effect of the relationship in the study (Sekaran & Bougie, 2016). These are based on the facts that can be observed and measured. This paradigm underpins quantitative research with intention to ensure the reliability of observation and generalisation of finding whilst concerned with rigor and replicability of the study (Sekaran & Bougie, 2016).

#### **b) Critical Realism**

Realism is a scientific inquiry that is also based on the factual. However, it is independent of individual concept that exists autonomously (Sekaran & Bougie, 2016; Bryman & Bell, 2014; Saunders *et al.*, 2009). According to Sekaran and Bougie (2016) critical realism observation and measure is subject to interpretation. Saunders *et al.* (2016) concurs by stating that in critical realism the world is adjustable to research purpose in an attempt to understand the reasons for the recommended change.

#### **c) Constructionism/ Pragmatism**

This is an inductive approach that is aimed at making sense of the area investigated through interpreting the account people in the researched area (Sekaran & Bougie 2016). Pragmatism recognises the different means of research interpretations however allows for the usage of data collecting methodology that will ensure validity and reliability of the research (Saunders *et al.*, 2009). Constructionism was used in this study as it works well with qualitative research methodology allowing the researcher to make sense of what others perceive about the research area (Creswell, 2013). This approach allows the researcher to make sense of various realities of the study.

### 3.4 Research design and methods

Research design is a framework in which the research is based on data collection of the study, its measurement and analysis to assist in answering research questions (Khotari, 2004; Sekaran & Bougie, 2016). There is various research design methodologies available to use with research. However, these are reliant on the research objective, research questions and research limitations, including data time and money (Sekaran & Bougie, 2016). The following are research designs that can be explored with qualitative research:

- Narrative research – this is one design technique that assists in putting together information, stories or events from individuals to facilitate a solid story. The data herein collected from documents and in-depth interviews with individual over time to assist with the reconciliation of stories – presenting a consolidated thematic narrative.
- Phenomenology – this technique is used to describe events or activities. This can be done through interviews, reading of related documents, through visit to places and events in order to gain insight from respondents on what is being investigated.
- Grounded theory – This technique’s main focus is more on finding out an explanation or theory behind the activity or event. It uses both interviews and documents to build a concept on the data presented. The sample size here is often larger as it assists in providing an understanding that result in informed strategy decision.
- Ethnography technique is mostly about cultural groups study and data is collected through observation where the researcher interact with the group as an observer in order to obtain first-hand experience.
- Case studies – This is a technique that focuses on in-depth investigation of a group or organization in order to gain insight on the subject under study. This may involve a description or explanation of the situation. Case studies are done in order to expedite a clear picture on what is under investigation from different angles and perspectives through various data collection methods that will be more appropriate (Sekaran & Bougie, 2016).

The grounded theory was adopted and the research method that the researcher engaged on in this study was qualitative research because it allows for deep examination of the subject area under study. The researcher used an exploratory research design in order to elicit in-depth detail information on the identified organizational studies as it assist with the unearthing of ideas and comprehensions of what is investigated (Khotari, 2004). This method allowed the researcher to explore detailed information through discussions with the people involved with the research subject area. This is supported by Cooper and Schindler (2008) when they state that qualitative research assists with in-depth understanding of the area being explored. Furthermore, Ehigie and Ehigie (2005) concur when they state that the in-depth interview is used in examining hidden and suppressed emotions of the respondents. According to Daniel (2011) exploratory research allows for the attainment of a general idea about the nature of the topic investigated instead of generalising on the population at large. This is also known as interpretative research as it strives to bring insight through explanation rather than description (Cooper & Schindler, 2008).

### **3.4.1 Quantitative research**

Quantitative research is known to be a numerical research method that involves collection of numerical data (Bryman & Bell, 2014). It involves a deductive approach in relationship to theory and research which means that the research is done on foundation of what is known and assume suggestion that is subjected to practical inquiry (Bryman & Bell, 2014). The researcher here distinguishes the research problem in relation to the developments around the study area where he tries to find out the trend from the study sample and concludes how they vary (Creswell, 2002). According to Creswell (2014), this method involves practices such as data collection, analysis, interpretation, and documentation of the results within the study. He further esteems that this methodology as way of testing objective theories by examining the relationship among variables.

Creswell (2014) define quantitative research as one where the researcher stemming hypotheses uses investigative tools such as survey and experiment to collect data on the subject being investigated utilizing a programmed instrument that will produce statistical data, however qualitative research employs investigation based on constructivist perspectives with intention to

build a theory by employing tools such as narratives, ethnographies and case studies. Quantitative research is more descriptive as its role is to define the circumstances as they are in time (Khotari, 2004). Greener (2008) echoes that quantitative research is an inductive approach used for theory testing that through the utilisation of facts focusing more on the objectivists view on the study.

These are considered through the reliability and validity of the results:

- **Reliability** – is the extent to which the results are consistent
- **Validity** – is the extent to which the results are accurate

### **3.4.2 Mixed research methodology**

The mixed method is viewed by Tashakkori and Creswell (2007: 208), cited in Creswell (2013), as an integrated methodology and Creswell (2013) is of the view that data collected using both methodologies, i.e. quantitative and qualitative give a concise analysis of the problem. The mixed method, is the only method that provides an opportunity to the researcher to compare findings of quantitative and qualitative research methodology in order to enrich and confirm the research results (Creswell, 2013; Cooper & Schindler, 2008 and Sekaran & Bougie, 2016). According to McKim (2015) the mixed research method necessitates the knowledge of both quantitative and qualitative methodology for it to add value in the research study undertaken. Both research methodologies involve data collection, analysis, interpretation and documentation of results in utilizing different tactics. Creswell & Clark, cited in Creswell (2014), states that it is also “more than simply collecting and analysing both kinds of data; it also involves the use of both approaches in tandem so that the overall strength of a study is greater than either qualitative or quantitative research.”

### **3.4.3 Qualitative research**

Cooper and Schindler (2008) defines qualitative research as a methodology that assists the researcher with in-depth understanding of why and how certain things happens in the proposed research area. The qualitative research is mainly concerned with the subjective assessment of the

opinion and behaviour through exploration. The quantitative method identifies a sample and population and collects data through survey and experimental studies, whereas the qualitative method engages in purposeful sampling espousing data collection through interviews, using open ended questions with the help of prepared guiding questions in order to ensure an all-encompassing data collection methodology (Creswell, 2014). Bryman and Bell (2014) echoes that a qualitative method is conducted by utilizing non-numerical data that entails words, pictures and actions. Kohari (2004) echoes the fact that this methodology allows for the analyses of various factor that motivate for a certain behaviour in an organization.

The qualitative methodology also focuses on trustworthiness, dependability and generalizability when considering the research results. Mason, cited on Bryman and Bell (2014), states that the criteria used for assessing qualitative research focuses on quality. Creswell (2013) identifies four types of data collection procedure, namely, qualitative interviews, qualitative observation, qualitative documents and qualitative visual and audio material.

Ravitch and Carl (2016) echoes that qualitative research attempts to understand individual, groups and phenomena in their natural settings in a way that understands and reflect meaning that people make out of their experiences. According to Ravitch and Carl (2016: 43) “Qualitative inquiry seeks to discover and to describe in a narrative reporting what particular people do in their everyday lives and what their actions mean to them”. Creswell (2014) alludes when he states that qualitative methodology is the technique used for exploring and understanding the importance individuals or groups attribute to a problem. The qualitative research epistemological position is interpretive as it emphasises on the understanding of the social world through the population interpretation (Bryman & Bell, 2014). It is clear that the interpretation of the participants in relation to the area of study is vital for in-depth in the research area.

The process of research involves emerging questions and procedures, data typically collected in the participant’s setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The final written report has a flexible structure. Those who engage in this form of inquiry support a way of looking at research

that honours an inductive style, a focus on individual meaning, and the importance of rendering the complexity of a situation (Bryman & Bell, 2014; Creswell, 2007 and Ravitch & Carl, 2016).

The qualitative interviews were considered for this study. These interviews involved data collection through interaction with the affected parties within the organization. There are different kinds of interviews that qualitative method employs in research namely:

- i. **unstructured interviews** where there is no specific point of discussion used to solicit issues that pertains to the problem area;
- ii. **semi-structured interviews** guided by a detailed questionnaire, these assist to elicit in-depth information on the identified field of study.

The research method that the researcher engaged on for this study was the qualitative research. The reason for using qualitative instead of quantitative methodology was due to the fact that it is regarded as the best method to use in exploring detailed information through discussions with the people involved with the research subject area. This is supported by Cooper and Schindler (2008) when they state that qualitative research assists with in-depth understanding of the area being explored. In order to be able to determine how application of KM has succeeded in driving service delivery efficiency in the identified organizations that represent public sector at both Provincial and National level.

### **3.5 Population**

Sekaran & Bougie (2016: 236) define population as “the entire group of people, events or things of interest that the researcher wishes to investigate.” The population targeted for this study were officials that included senior managers, middle managers and operational working under knowledge management, strategic planning and monitoring and evaluation in both organizations. The researcher’s choice of population is inclined by the level of exposure of the population to the research study.

Table 3. 1 Population Sample

Participant no	Gender	Designation	No of year in the organization
R1	Male	Assistant Director	1 year and 8 months
R4	Female	Senior Manager	9 years
R2	Male	Middle Manager	3 years
R3	Male	Assistant Director	5 years
R4	Female	Senior Manager	9 years
R5	Male	Middle Manager	11 years
R6	Male	Executive	6 years
R6	Male	Executive	6 years
R7	Female	Director	10 years
R8	Female	Chief Director	1 year
R9	Male	Consultant	3 Years
R10	Male	Director	5 months
R11	Female	Director	6 Years
R12	Female	Deputy Director	7 years

### 3.6 Sampling and sampling strategy

Sampling is a process of selecting the appropriate individuals, objects or events as representatives of the population to be sampled for research (Sekaram and Bougie, 2016). Sampling design is distinguished between probability and non-probability sampling.

In probability sampling each unit (population/sample) is known and has a high chance of being included in the sample, however in non-probability not every unit is acknowledged and it is not possible to make a known interpretation about the population meaning the sample is not representative (Ghuri & Gronhaug, 2010 & Sekaram and Bougie, 2016 ). Probability sampling does not allow for specific elements of population to be selected which is a strength of non-probability sampling (Ghuri & Gronhaug, 2010). Khotari (2004) regards this technique as a one where the researcher purposely selects the population choice for intense study that will be the representative of the whole.

Techniques that falls under probability and non-probability:

There are five main techniques can be used to select a probability sample:

- |                          |   |
|--------------------------|---|
| <b>random sampling</b>   | it has to do with selecting the sample at random giving every possible sample group a chance of being picked up and become part of the sample.  |
| <b>systematic</b>        | focuses on selecting the sample at regular intervals from the sampling frame.   |
| <b>stratified random</b> | this is an altered random sampling where the population is divided population is divided into sections or levels grounded on their characteristics to ensure adequate representation. |

<b>cluster</b>	this a kind of sampling where population is grouped into cluster based on the data source, e.g. geographical area or type of manufacturing, etc.
<b>multi-stage</b>	sampling is applied in big inquires extending to a considerable large geographical area, say, the entire country.

Multistage sampling refers to sampling plans where the sampling is carried out in stages using smaller and smaller sampling units at each stage. In a two-stage sampling design, a sample of primary units is selected and then a sample of secondary units is selected within each primary unit. This handout outlines the development of estimators under the general setting of two-stage sampling, considers the allocation question under the setting of equal sized primary and secondary units, and briefly examines three-stage sampling.

### **Non-probability technique**

The qualitative research methodology is mainly about collecting rich information that enhances understanding of the problem under study. Exploratory research, according to Daniel (2012), has nothing to do with generalization of larger population, however its purpose is to attain a general idea about the nature of the problem of the topic to be investigated. Therefore non-probability is an adequate approach in relation to choice of sample to be sampled in order to gain insight of the study. Sekaram and Bougie (2016) concurs when they state that sampling in qualitative research is done based on a target group and exploits non-probability as there are no statistics deployed.

Non-probability sampling allows for purposive sampling as it does not provide opportunity for estimation of the probability (Khotari, 2004 and Saunders *et al.*, 2009). It is also referred to as deliberate sampling, purposive sampling and judgement sampling. Khotari (2009) affirms that under non-probability sampling, the researcher purposively chooses sample on the basis that the selected sample will be representative of the whole, therefore not affording a basis of estimation. The sampling strategy engaged in the study was purposive sampling as it one a technique that assist in ensuring that the population is selected on the basis of expertise on the subject

investigated. This techniques allows the researcher to consciously select individuals that will help in getting information needed to answer research questions. Ravitch and Carl (2016) states that purposeful sampling provide rich context and detailed explanations of specific population, and signifies that population are purposefully chosen to participate in the research for specific reasons, including that they have experience, have knowledge of a specifics occurrence.

The researcher in this study, as a person well conversant with the knowledge of the research problem identified within the organizations selected, played a critical role in identifying the specific units that were key for the investigation of the study. These units have a critical a role in the management of organizational and the identification of knowledge relevant in achieving organizational objective.

### **3.7 Data collection Instrument**

Collecting data is a process of locating and choosing individuals that are key for the effectiveness of the study done by obtaining their permission to study them, and collecting information by asking the people questions or observing their behaviours (Creswell, 2003). Data collection techniques of a qualitative study are qualitative data observation and qualitative interviews amongst others, however the study engaged on the conducts face-to-face interviews with participants that involved unstructured and generally open-ended questions with intension to stimulate views and opinions from the participants. The interviews in qualitative research entails face-to-face engagements with participants that are characterized by open-ended questions (Creswell, 2013).

Semi-structured interviews as data collection methodology is regarded as the best method to use in exploring detailed information through discussions with the people involved in the research area for better understanding. These kind of interviews allows the interviewer to make more judgement and gain more insight on the knowledge required through face to face gesture. Robson (2002) confirms this when he states the importance of verbal cues for in-depth understating. The study was conducted through interviews to the sample identified within the selected organizations.

The advantage of this technique is that the respondents' feelings and emotions are uncovered in relation to the problem understudied, hence the method is chosen to assist in investigation of how the application of KM has succeeded in facilitating service delivery efficiency the organizations understudy and the crucial factors for affect the success of the mainstreaming of KM in these organizations.

Prior to the interviews ethical concerns were taken care of. Permission to access these organizations was sourced and obtained through the gatekeepers provided by the University of KwaZulu-Natal (UKZN). Prior to interviews the appointment were sent with the participants through e-mails with the informed consent letter attached that outlined the aim of the study to ensure that they understood. It further outlined the issues of confidentiality and ensured anonymity of the participants.

The interviews were conducted in the following departments:

- i. Department of Transport and Public Works (Western Cape Government);
- ii. National Treasury (National Government).

The interviews were scheduled for 45 minutes with each participant. The researcher took notes of the interviews and as a backup recorded the participants with the recording device and transcribed every interview using her own experience of shorthand to make sure that all information gathered was captured on a developed spreadsheet within the day. The interviews were conducted within the month of September and due to the nature of the study these were more concentrating on the participant's insight, views, perception and their experience in relation to the research topic.

### **3.8 Data analysis**

There are several data analysis techniques that can be engaged with a qualitative study, however in this one thematic analysis was employed as one that allows for identification, analysis and description of patterns throughout the data set of the study (Bryman & Bell, 2014). Thematic

analysis assists with ensuring that the data set is systematically arranged according to the wealth of knowledge it expounds (Braun & Clarke, 2006). As a result this makes this techniques make the research more exhilarating as many more themes around the study unfolds that the researcher did not anticipate. Thematic analysis is branded by its flexibility and ability offer a rich and detailed, yet complex account.

The data gathered from the interviews was classified and various themes identified based on the responses given by the different participants.

### **3.8.1 Validity and reliability**

Reliability and validity in qualitative research are perceived as trustworthiness, rigour and quality of the study (Golafshani, 2003). Validity is concerned with the accuracy and truthfulness of the research whereas reliability focuses on the constancy and replicability of the study. These two aspects of the research are key in ensuring the quality of the research utilising the following criteria as measure of quality: trustworthiness, rigour, consistency and replicability. Differently in the qualitative as opposed to the quantitative research. This is supported by *Reliability and Validity of Qualitative and Operational Research Paradigm Bashir, Afzal and Azeem* (2008: 42) when they state that "...the quality of a research is related to generalizability of results". The reliability and the validity of this study was ensured through questions prepared by the researcher which were the same to all participants and in line with the research study.

#### **3.8.1.1 Validity**

The tools and process followed to collect data in this study determined the accuracy of the study findings based on the researcher's interpretation of the participants gestures during data collection (Creswell, 2013). Validity in a qualitative research is measured differently. In the study conducted validity was ensure through the voice recording of the interviews that allowed the researcher for constant visits to the data collected during the transcription to ensure that emergent themes were true reflection of the participants views. The verbatim responses extracted from the interviews

were used in the analysis to confirm the ultimate themes used are true reflection of the participant's accounts.

### **3.8.1.2 Reliability**

Sekaran & Bougie (2016) state that reliability is divided into two which is category and interjudge. The category is the extent to which the researcher can utilize classifications of categories to organize data whereas interjudge reliability is the level to which the data collected can be generalized externally and be representative internally. Reliability of the research method is confirmed by the consistency and replicability of research results, also focuses on the trustworthiness of the findings. The rich detailed responses given by participants which at times entailed examples which is informed by the participants experience confirmed the reliability of the study.

#### **3.8.1.2.1 Strategies used to ensure validity and reliability**

In order to ensure the validity of the study the researcher utilised thick description of findings in an attempt to achieve external validity. This allows for the researcher to portray emotion and the thinking of the participants of the study (Ponterotto, 2006). Furthermore, the findings were compared with what literature had to say and founded on the literature review expounded in chapter two.

### **3.9 Limitation of the study**

The involvement of the researcher in the subject researched within government as a policy developer. The participants tended to want to relate the areas of their work then answering question. The participants used the interviews to air their concerns that are not primarily related to the study. Inability to identify the relevant participant even though the sample technique was purposeful as the researcher had to rely on the department's internal engagements with its

employees in assisting the researcher to collect information, however the willing participants engaged were able to provide adequate information.

### **3.10 Ethical considerations**

The ethical considerations highlights the manners in which the researcher will conduct herself or himself in ensuring the credibility of the study as she pursue the research process (Sekaran & Bougie, 2016). This allows the researcher identify and balance prejudices that might be experienced in the study. Ethical clearance was obtained from the University of Kwa Zulu-Natal that enabled the researcher to proceed with the study on 4 April 2017 and attached as appendix on the document, this was done based on the attainment of gatekeepers' approval letter from the organizations identified for the study as proof that they agree to participate. In conjunction with the request by the researcher to the relevant organizations to conduct the study, the organizations were assured of the anonymity of the participants on study and this was also clarified before the commencement of the interviews with the relevant participant.

The Informed consent letter, attached as appendix, was sent through to the organizations after the ethical clearance was issued by the university. This is the letter that formally invites the identified units within the organizations to participate in the study. This letter outlined the research topic, the aim of the study, its significance, the rights of the participants and the approximate time the interview would take. An informed consent form, signed by participants, and attached to this document as an appendix, is evidence that the participants voluntarily agreed to take part in the study. This form was given to the participants to sign before interviews commenced, and all the participants did sign the consent form.

### **3.11 Conclusion**

This chapter mainly focused on the research methodology of the study. The qualitative research methodology was adopted because it is regarded as the best method to use in exploring detailed

information through discussions with the people involved with the research subject area. The research design of the study addressed the population, sampling and sampling strategy, and data collection instrument and data analysis. Ethical consideration that that could have impacted the study was attended to. The following chapter will present the key findings on the research study.

## CHAPTER 4

### RESEARCH FINDINGS AND ANALYSIS

#### 4.1 Introduction

The preceding chapter was predominantly concentrating on the research methodology adopted for the purpose of conducting the study, of which was qualitative methodology. It was characterised by interviews as a data collection instrument. This chapter provides a primary data analysis based on the data collected through interviews in an attempt to respond to the research objectives. The research findings were analysed and discussed aligned with the literature review presented on chapter two on this study. Thematic analysis was used to guide the discussion emanating from the interviews. The objectives were highlighted in chapter 1 as:

- a) to determine the effect of KM on organizational efficiency in public service organizations;
- b) to explore the factors that affect the successful implementation of KM in public service organizations;
- c) to assess the extent to which the factors affect the implementation of KM in public service organizations;
- d) to provide recommendations on how public service organizations can manage knowledge effectively.

#### 4.2 Demographics information

The interview was conducted with 12 people from both the department of Public works and transport in the Western Cape Province and the National Treasury. The respondents represented both males and females from operational staff, middle management, senior manager and one executive. The selection of the population was based on purposeful sampling and the unit the sample of the study was chosen from was, knowledge management, strategic planning and monitoring and evaluation to avoid subjective responses.

### 4.3 Table of objectives and themes

Table 4. 1 Table of objectives and themes

Objectives	Questions	Themes
<b>Objective 1</b>		
To determine the effect of knowledge management on organizational efficiency in public service organizations		
	Question 1	
		<ul style="list-style-type: none"> <li>• The interpretation of what knowledge management is</li> <li>• Knowledge management as strategy for harvesting and retaining knowledge</li> </ul>
	Question 2	
		<ul style="list-style-type: none"> <li>• Knowledge Management and learning organizations</li> <li>• Knowledge management, capacity building and learning Culture</li> <li>• Knowledge Management on improved business processes</li> <li>• Knowledge Management for informed planning</li> </ul>
	Question 3	
	<ul style="list-style-type: none"> <li>• Knowledge Management in facilitating knowledge sharing for informed organizational strategy</li> </ul>	

<b>Objective 2</b>		
To explore the factors that affect the successful implementation of knowledge management in public service organizations		
	Question 1	
		<ul style="list-style-type: none"> <li>• Organizational culture and knowledge management</li> <li>• Leadership buy-in and support</li> <li>• Knowledge Management system for effective knowledge sharing and knowledge retention</li> <li>• Knowledge Management system for effective knowledge sharing and knowledge retention</li> </ul>
	Question 2	
		<ul style="list-style-type: none"> <li>• Leadership buy-in and support</li> <li>• Organizational culture and change management</li> <li>• Technology/system to support the KM practices</li> </ul>
<b>Objective 3</b>		
To assess the extent to which the factors affect the implementation of knowledge management in public service organizations	Question 1	
		<ul style="list-style-type: none"> <li>• Increase in maturity level and culture</li> <li>• Facilitate collaborations that leads efficient business processes</li> </ul>

	Question 2	
		<ul style="list-style-type: none"> <li>• Access to Information</li> <li>• Enhanced skills development</li> <li>• Facilitate knowledge retention</li> <li>• Promote collaborative way of working that promotes transversal operation</li> </ul>
	Question 3	
		<ul style="list-style-type: none"> <li>• Knowledge Management Strategy</li> <li>• Communication plan</li> <li>• Change management strategy</li> <li>• Government-wide retention strategy</li> </ul>

**4.4 Results on primary study conducted**

The results of the study were based on the interviews conducted. The findings presented were in line with the research objectives strengthened by the interview guiding questions. Manual thematic analysis utilised in analysing each question resulted in the emergence of various themes influenced by the participants’ responses.

**4.4.1 Objective 1: To determine the effect of knowledge management on organizational efficiency in public service organizations**

This objective sought to determine the effect that KM has on organizational efficiency in public service organizations. There were three questions developed in line with this objective. The following information presents the data findings about the question asked associated to objective 1:

#### **4.4.1.1 Question 1: What is your understanding on knowledge?**

Question 1 was designed to enable the researcher to gain the understanding of participants on knowledge management. From the data collected there were various interpretations on what KM is and the first theme was on interpretation of knowledge management.

Participants were of the view that understating of what KM seeks to achieve in an organization will have an impact on how the organization performs. This is supported by Mkhize (2015) when he states that organizational survival is highly dependent on its ability to create and disseminate knowledge that is key for organizational performance.

In an attempt to answer question 1 the following themes emerged from the engagements:

- The interpretation of what KM is
- KM as strategy for harvesting and retaining knowledge

##### **4.4.1.1.1 The interpretation of what knowledge management is**

There were various interpretations on what KM is from participants, however there was a general consensus from the participants that it is about the management of knowledge in the organizations for organizational efficiency. They argue that it entails a process of gathering, creation, classification, storage and dissemination of knowledge accumulated over time by the employees in the organization for business continuity. Furthermore, KM is also regarded by participants as a process of capturing the learnings that occur within the organization for the benefit of the organization. This is evident in the following responses from participants who confirm this by stating that:

*“Knowledge management entails the processes of finding existing knowledge or creating knowledge, then store it, classify, analyse, redistribute and apply”. (R2)*

Another respondent stated that:

*“Knowledge Management is about capturing the experiences, the learning that happen in the organization and making sure that it is used for the benefit of the organization so that the organization can learn from such experience. It entails knowledge recorded in documents and*

*records and it also entails the know-how that people have in their heads and is not recorded”.*  
(R7)

Furthermore, one of the participant defined KM as an employee learning cycle, to be precise, as it commences from entrance to departure in the organization. This cycle happens through the interaction with other employees as they gather knowledge from what is shared, from observation and also from different medium in the organization and what they leave the organization with when exiting to ensure organizational effectiveness and competitiveness.

It is clear from the findings that KM is a process that promotes the management of organizational knowledge to ensure public service learning that will enhance effectiveness. This can not happen without the organization’s human capital which is key in knowledge creation and use for effective productivity. This is supported by the studies of Brajer-Marczak (2016) and Omotayo (2015) where they view KM as process that involves human participation in the operations phase. They are recognise that during operations there are lessons learnt in this process that have to be documented as part of new knowledge created and acquired that can be accessible for knowledge re-use to enhance productivity in the organization.

#### **4.4.1.1.2 Knowledge management as strategy for harvesting and retaining knowledge**

Central to knowledge management is the importance of knowledge preservation (knowledge retention) as indicated by participants as a key component of the organizational intellectual property for future use. Moreover, the participants recognise knowledge harvesting as another important elements of KM as it facilitates gathering of information for learning that is significant for improved performance.

*“KM is about retention, maintenance development, harvesting and creating and capacity of information in an organization – building a learning organization and to retain for future use so that you do cost-effective value for money systems.”*

And also it was indicated that: *“Knowledge management is about retaining information in such a way that you keep the institutional memory in the organization (as people come again), for the next generation to come so that all the best practices are used again instead of reinventing the wheel, making it accessible to all people in an organization, building from that to create a centre of excellence for your organization”*. (R12)

An example was given by one of the respondents on the importance of knowledge retention when s/he alluded to the case of one of the key long-serving experts in the finance unit who, before leaving, communicated all delegations and assisted his subordinate to understand all the processes entailed in their area of work in order to ensure business continuity with the assistance of the KM unit as a facilitator. This is visible in the studies of Bessick and Naicker (2013) and Becerra-Fernandez and Sabherwal (2014) when they agree that knowledge retention ensures that critical knowledge of the organization’s operations is shared and accessible beyond the exit of knowledge source/experts in the organization to ensure sustainability.

From the above response the findings indicate that most of the participants acknowledge knowledge harvesting and retention as critical elements for organizational effectiveness to build organizational intellectual assets. This is supported by Lapiņa, Maurāne and Stariņeca (2013) when they state that the key driver of organization development is the acquisition and retention of its competitive advantage through knowledge. This is further enhanced by Bessick and Naicker (2013) and Becerra-Fernandez and Sabherwal (2014) assertion when they agree that knowledge retention facilitate that critical knowledge of the organizations operations is shared and accessible to ensure sustainability.

#### **4.4.1.2 Question 2: Explain the role played by knowledge management in ensuring organizational effectiveness**

This question was intended to clarify the role of KM in ensuring the effectiveness of the organization.

The following themes emerged from the responses:

- Knowledge management and learning organizations
- Knowledge management, capacity building and learning culture
- Knowledge management on improved business processes
- Knowledge management for informed planning

#### **4.4.1.2.1 Knowledge management and learning organizations**

The role of knowledge management is to facilitate creation of learning organizations as indicated by Yusoff (2005) when he defines learning organizations as the ones that ensure that its employees are developed to their full potential through learning processes for improved organizational performance. This is evident in the participants' response as they stressed the importance of KM in ensuring that government is a learning organization.

*“KM must make sure that the organization becomes a learning organization as they keep learning through formal and informal structures and people want to share experience and want to learn from each other at the same time; to ensure that lessons are learnt from the knowledge exchange in whatever knowledge they gain”. (R3)*

From the engagements with participants it has become resolute that for public service to be effective it ought to be a learning organization. This is supported by Dewah (2015) in his paper where he states that the intent by the organization to improve its service delivery is evident through its vigorous participation in the learning of its employees. In Addition Dewah & Mutula (2014) argue that organizational learning allows organizations to harvest knowledge that enhances productivity and innovation when retained.

#### **4.4.1.2.2 Knowledge management, capacity building and learning culture**

The participants during the interviews highlighted the role of KM in ensuring skills development and facilitating a culture of learning for improved service delivery. This is confirmed by the participants in their response as they indicated that in order to drive the organizational strategy, KM facilitates skills transfer and promote learning through various platforms such as training, mentoring and coaching, shadowing and observations. These take place throughout the time of the employee in the organization starting from induction.

It is evident from these finding that KM plays a key role in enhancing skills development and promoting a learning culture. This is confirmed by Bessick & Naicker (2013) when they state that where knowledge sharing is not a custom, employees become sole owners of the knowledge. This poses a risk of losing this valuable asset when the employees leave, resulting in the organization losing its intellectual capital. This is concurred by Yusoff (2005) when he reckons that competency in the public sector can be improved through KM that will facilitate customer satisfaction through collaborative learning and sharing public service knowledge and experiences for improved service delivery. Furthermore Kanuka and Garrison, cited in Mkhize (2015), concur when they claim that transfer and creation of skills and knowledge in learning organization is enhanced through collaborative learning that supports critical thinking.

#### **4.4.1.2.3 Knowledge management for improved business processes**

Respondents felt that KM plays a critical role in their areas of work, assisting them to make informed decisions, resulting in improved business processes. The relevant knowledge base accumulated and shared assist in expediting improved organizational performance and consequently achieving organizational goals. This is established in the following:

*“If knowledge management is properly implemented meaning clearly defined what it means for the organization and its intended purpose, I think the role KM is to improve business process of the organization so that we do not repeat mistakes but we learn from them so that we get better and better in doing things” (R7).*

From the responses it became clear that KM has a substantial role to play in stimulating effective organizational decisions. This is evident in the study by Voronchuk & Starineca (2014) where they state that the decision-making process is influenced by organizational knowledge for organizational advancement and is associated with learning as it is a practice that promotes sharing.

#### **4.4.1.2.4 Knowledge management for informed planning**

In monitoring the performance of the organization, KM has been recognised by participants as a learning tool that enriches informed planning. In addition, participants are of the view that collaboration promoted by knowledge sharing plays a pivotal role in improved organizational productivity. One of participant who felt strongly had this to say:

*In the absence of learning out of our monitoring we will not enhance our planning, and planning is part of service delivery (R8).* This highlights the importance of informed planning to eliminate wasteful expenditure.

It is clear from the respondents that the role of KM is perceived as key in enhancing organizational planning that will inform the organizational strategy to drive effective and efficient delivery of services to citizens. This was demonstrated by the different roles emphasised by participants in ensuring improved service delivery in government. This is supported by Alavi and Leidner, cited by Paliszkievicz, Svanadze and Jikia (2017), when they state that only in environments that are collaborative and facilitates knowledge sharing, well-informed or experienced people share knowledge openly thus enabling knowledge exchange that results in learning. Furthermore Dewah and Mutula (2014) indicate that Public Service is characterised by its principles of good governance and KM supports these by facilitating a free flow of knowledge exchange for organizational learning and planning

#### **4.4.1.3 Question 3: Could you please share with me your understanding of the role knowledge management in your organization and its role in achieving organizational strategy**

Question 3 sought to understand the role of KM in the respective organizations towards the achievement of organizational strategy.

In the quest to answer question 3 the following theme emerged:

- Knowledge management in facilitating knowledge sharing for informed organizational strategy

##### **4.4.1.3.1 Knowledge management in facilitating knowledge sharing for informed organizational strategy**

Some of the respondents in the organizations interviewed were of the opinion that KM has played a pivotal role in ensuring the transfer of knowledge amongst the people within the organization that warrants informed organizational strategy. On the other hand, some felt strongly that knowledge management, though it has been with their organizations for some time, is still at infancy stage and people are only starting to embrace the sharing of knowledge due to the introduction of various knowledge sharing platforms such as knowledge colloquium, lunch and learns, brown bags amongst others.

These platforms allow for experts to come and share their expertise for example in NT which is mainly focused on policy development, people from different spheres specialising on Public Finance Management Act come and share how best this policy should administered in government for promotion good governance. As a result contributing to organizational strategy and ensuring that the competency remained within the organization. On the other hand the DTWP uses the lunch and learns to update the department on projects each branch is working on, progress and challenges in an attempt to ensure that there are no overlaps. The knowledge by specialists is retained and

everyone is aware of what the department is seeking to achieve, what new knowledge has been discovered and what lessons were learnt.

The knowledge sharing initiatives are perceived by participants as part of staff development and also facilitates a culture of learning that promotes a learning organization. Proceeding from the knowledge exchange participants are convinced that knowledge shared will inform strategic planning processes.

It is clear from the responses that knowledge sharing is fundamental in the public service in ensuring that important knowledge is identified and exploited to inform the organizational strategy that will drive efficient service delivery. This is supported by Nesheim & Smith (2015) when they recognize that essence of knowledge sharing as an important element of KM that allows for transfer of individual learning for organizational competence. This is also substantiated by Dewah and Mutula (2014), Nouri, Mousavi & Soltani (2016) when they contend that beyond the quest for achieving organizational goals, KM facilitates the process of identifying, sharing and creation of new critical knowledge and re-utilisation of existing knowledge which is key to organizational learning and its efficiency.

#### **4.4.2 Objective 2: To explore the factors that affect the successful implementation of knowledge management in public service organizations**

The aim of this objective was to establish factors that affect the successful implementation of KM in the public service organizations. There were two questions developed and administered during the interview in an attempt to address the objective. The subsequent information presents the data findings based on the question asked related to objective 2.

#### **4.4.2.1 Question 1: Identify and discuss the factors that affect the implementation of knowledge management in your organization?**

Question 1 was intended to assist the researcher with understanding the factors that affect the implementation of KM in the identified departments for the study.

From the interviews there were several factors underscored by participants as key factors affecting the implementation of knowledge management. The following themes came out strongly from interviews as the factor:

Themes:

- Organizational culture and knowledge management
- Leadership buy-in and support
- Knowledge management system for effective knowledge sharing and knowledge retention

Girard and McIntyre (2010), cited in Bessick and Naicker (2013), suggest that there are several factors that ensures successful implementation of KM in an organization including leadership, culture, roles and responsibilities, information technology infrastructure and measurement.

##### **4.4.2.1.1 Organizational culture and knowledge management**

The majority of the participants emphasised the importance of the conducive culture for learning as one of the key factors that contribute to effective implementation of KM within the organizations. The culture varies from organization to organization as other participants acknowledge that in their organizations KM is still at infancy stage, though it has been there for quite some time.

*“Culture – the organizational culture is important, because you must have a culture of people wanting to share and learn, if you don’t have that culture, it is difficult to implement knowledge management”.* (R3)

Essentially to the culture, participants acknowledged the significant role played by leadership in influencing a culture of learning that promotes innovation. This is supported in the study Zennouche and Zhang (2014) when they claim that for organizations to attain high performance goals, leadership and organizational culture should be seen as an integral constituents for competitiveness to enhance innovation.

This is supported by one of the respondents when they state the following:

*“Our leader leads by example, and has lots of influence, the influence to change the culture starts by her and if she leads by good example the organization will be influenced to change”.* (R4)

However there are few traces of invisible conducive cultures with the organizations and other participants have this to say in relation to the role of leadership in ensuring a conducive culture for KM implementation.

*“No formal policy, no culture that enables/promote knowledge transfer, fear by experienced people to share as they feel threatened/uncertain that the people they share with might unseat them in their positions in years to come. There are no managers that are willing to walk the talk with new incumbents”.* (R1)

The need to change people’s mind-set as part of culture re-orientation is also alluded to by respondents as key element on laying a foundation of a learning culture based on trust. One of the participants reiterated the need for change management to form part of KM terminology as *“People need to shift from the old ways of doing things, thus a need for a strategy to change people perceptions”.* (R5)

From the engagements in relation to organizational culture and KM it is clear that there is still a lot that needs to be done within organizations and change management strategy being part of the action plan to ensure that there is a conducive culture that promote free flow of information and that promotes knowledge exchange if government wants to be effective and efficient in service delivery. This will also assist in stimulating innovation. According to Sharma & Sharma (2010) the organizational culture should demonstrate features of ‘accountability, collaboration, decentralized leadership, alignment and adaptability for the organization to remain productive. In addition, Jończyk (2014) supports when reiterating that the effect the culture in organizations has in the level at which innovation is inspired.

#### **4.4.2.1.2 Leadership buy-in and support**

It came out clear during the course of the interviews that leadership buy-in is key in ensuring that KM is embedded in the organizations. The following were some of the participants’ response to leadership as one of the factors affecting the implementation of knowledge management:

*“I think leadership can help implement KM and can drive KM, if leadership is not supportive of KM it will not happen”.* (R7)

Another participant in support of the importance of leadership shared the following:

*Leadership should be KM champions, if not it would be a great disadvantage to themselves in terms of decision-making capacity, and great disadvantage to KM and citizens because we will continue to have unintended consequences of the decision, through KM we make sure we eliminate that”.* (R8)

The collective response of the participants clearly indicate that more leadership participation in driving KM is needed and without it there will be no organizational learning as a culture in government. This is supported by Villar *et al.* (2014), where they state that KM practices are dependent on the leadership’s attitude to facilitate and promote learning for improvement and advancement in the organizations. Micić (2015), in support also states that the role of leadership

in organizational learning is to promote a culture of acquiring, creating, sharing and usage of new knowledge for organizational advancement.

#### **4.4.2.1.3 Knowledge management system for effective knowledge sharing and knowledge retention**

The participants during the interview were in agreement with regard to the significance of a system for knowledge sharing and dissemination, however, not all departments interviewed have managed to source out a system that will serve as a central repository that will support knowledge sharing due to budgetary constraints.

This came out strongly during the interviews as participants highlighted the following as one of the factors affecting the implementation of KM in the organizations.

*“There is a challenge of unavailability of a platform to share knowledge, most of the things are done on line these days the department does not have a platform where ideas can be shared and learning can happen online”. (R7)*

Moreover, budget constraints have been suggested as one of the key factors affecting knowledge sharing where systems have been sourced and training was needed and budget was an issue. One of the participants indicated that *“though a lot of money has been spent in ECM, budget constrain in the time we live in now hinder us in doing all that we would like to. The system is tied up to the budget and the system is only as good as the people that need to utilise the system”*. (R4)

In addition, the restricted access to social media in government as a knowledge sharing platform that can enhance innovations, has been alluded to. The participants strongly emphasised the significance of the availability of technological systems like social media that promotes knowledge sharing as one of the factors affecting the implementation of KM in the organizations.

*“Government should invest in technology and allow access to IT platforms like YouTube and social media, Drop Box and Google as their non-availability is career limiting whilst these allow access to world knowledge that is current and up-to-date”*. (R1)

In the processes of trying to find out what participant understood about knowledge management, it was assumed to be about “*retention, maintenance development, harvesting and creating and capacity of information in an organization thus building a learning organization and to retain knowledge for future use*”. (R11)

The issue of knowledge retention for future use could not be separated from the system as it was made clear by participants that the retention is meant to ensure knowledge transfer/sharing of critical knowledge consequently the system is central to sharing.

From the engagements with the participants it became clear that there is a need to ensure that government critical knowledge needed to be retained and be stored centrally where all employees can access it to expedite productivity. It was also noted that there is a need for government to invest in technological platforms that will facilitate KM for public service effectiveness. This is supported by the literature of Becerra-Fernandez & Sabherwal (2014) where they indicate that learning organizations are defined by knowledge sharing systems that support the sharing and re-use of both individual and organizational knowledge.

#### **4.4.2.2 Question 2: Of the factors identified above, could you please identify the most critical factors that you regards as key and justify your answer**

This question served as a follow up that sought to understand the critical factors identified by the participant from the factors mentioned above and the justification thereof.

The main themes emerged were:

- Leadership buy-in and support
- Organizational culture and change management
- Technology/system to support the KM practices

#### **4.4.2.2.1 Leadership buy-in and support**

The findings indicated that participants felt strongly that top management buy-in and support is crucial for the successful implementation of KM in the public service as whatever the leadership in the organization endorses become a way of how things get done within the organization.

This is what participants had to say to support this view:

*“if the example is set by seniors it becomes the way of working and subordinates will easily follow, but if seniors do not support you and don’t do what they preach it becomes very difficult even for the change manager to change behaviour of staff”*. (R2)

The importance of understanding the value of KM by leadership as part of organizational strategy was raised by participants as the fundamental contributing factor that can be used to achieve the organizational goals. They further, argue that understanding will in return result in the buy-in and support that will influence the organizational behaviour that promotes learning for improvement.

*“Leadership buy-in and appreciation of KM from top down by. Our HOD understands the importance, appreciate the significance of knowledge management, so she ensures that the benefits of KM are filtered down wards through her top management team”*. (R4)

It was clear from the interviews that without leadership buy-in and support KM will not be exploited as a strategic asset of the organization that will assist in driving effective and efficient processes on the delivery of services. This is supported by Villar *et al.* (2014) when they state that KM practices are dependent on the leadership’s attitude to facilitate and promote learning for improvement and advancement in the organizations, this is no different in government.

#### **4.4.2.2.2 Organizational culture and change management**

During the interviews the organizational culture was recognised by participants as the key impediment towards the free flow of information in government organizations that seems to promote silo working. The participants insisted that change management in relation to KM should

not be once-off but continuous and supported by leadership in an attempt to instil a conducive culture of knowledge sharing and learning.

The following were the responses that were given by participants:

*“When you look at organization change and when you want to implement KM in the organization it is important that it be driven from the top”.* (R3)

Also another respondent stated that

*“Culture – people are extremely complex afraid of change and losing their jobs and changing people’s mind set assisting them to see the bigger picture”.* (R10)

The findings here indicated that the importance organizational culture in ensuring that KM practices are embedded in the public service. This is supported in the study by Chang and Lin (2015) where they concur that organizational culture plays a key role in ensuring that KM processes are implemented for facilitating the transfer of knowledge that results in learning. The silo way of operating in the public service can also be corrected through collaborative way of working that will result in improved performance. Perez-Soltero and Soto (2017) state that a culture promoting collaboration enhances professional and personal development thereby allowing for the creation of innovative ideas across the organizations.

#### **4.4.2.2.3 Technology/system to support the knowledge management practices**

The establishment of a knowledge hub/portal as link between knowledge products and organizations’ functions has been acknowledged by participants as a critical factor for effective KM implementation. The barrier to public service innovation as indicated by some respondents has been detriment to the limitation on the technological platforms that enable government employees to be on par with the world knowledge, as there is an urge in government to do thing differently.

*This what one of the participants had to say “the biggest constraint is barrier to innovation that is access to YouTube, social media, etc. as platforms for knowledge advancement due to the pace the world is moving”. (R9)*

The findings confirms the importance of technology and technological platforms as an enabler that expedite the implementation of KM practices for increased government productivity. Mavodza and Ngulube (2013) supports by stating the importance of a system in an organization that will facilitate knowledge sharing and transfer if the knowledge acquired is to be of value to the organization for innovation.

#### **4.4.3 Objective 3: To assess the extent to which the factors affect the implementation of knowledge management in public service organizations**

The purpose of this objective is to understand the participant’s view on how factors identified in the objective above affected the implementation of KM in the public service organizations.

##### **4.4.3.1 Question 1: To what extent has factors alluded to above reinforce the institutionalization of knowledge management in your organization?**

The purpose of this question was to understand the respondent’s view on the extent to which the factors they highlighted supported the integration of KM practices in their organizations operations.

The themes identified were:

- Increase in maturity level and culture
- Facilitate collaborations that leads efficient business processes

##### **4.4.3.1.1 Increase in maturity level and culture**

The participants revealed that top management support has afforded the department an opportunity to have KM steering committee that is represented at the senior management level. This has allowed for “*building knowledge management into organizational culture – cement it down in to*

*organizational culture”. It has affected the organizational KM maturity, it has moved slightly and there is more awareness in term of KM and the value that it can bring to the organization”. (R6)*

It has been clear from the engagements with the participants that the leadership buy-in and support has greatly impacted the entrenchment of knowledge sharing culture within the organization as a result the KM practices are becoming a norm resulting in the betterment of how people work. Zennouche and Zhang (2014) supports when they argue that for organizations to attain high performance goals, leadership and organizational culture should be seen as integral constituents for competitiveness to enhance innovation. Furthermore, Villar *et al.* (2014) acknowledge that KM practices are dependent on the leadership’s attitude to facilitate and promote learning for improvement and advancement in the organizations.

#### **4.4.3.1.2 Facilitate collaborations that lead efficient business processes**

The participants felt strongly that the culture change within their organizations enabled them to collaborate with other colleagues, making their business processes more efficient and effective. This is what one respondent had to say *“It has basically made my operations much easier, as I have access not only to information but people that have knowledge and assisted me working in more structured way, I work with problems and need to respond to problems and if I do not know the problem I would address that in term of strategy development and so I need access to knowledge and KM has provided me with accessibility and collaboration to do my job”*. (R5)

Furthermore, respondents alluded to the fact that there is support for KM assisted in filling up of the decision-making gaps as it ensure that there is critical and analytical base in place to enhance decision-making simplify business processes that will result in improved performance.

The findings under this section confirm the fact that collaborative efforts results in improved performance. This echoes Dikotla *et al.*’s (2014) sentiments that improved business process and service delivery in the public service can only be experienced when the knowledge created is

shared between employees or across departments allowing for capitalisation on the new knowledge that results in innovation and productivity. According to Perez-Soltero and Soto (2017) a culture that promote collaboration enhances professional and personal development allows for the creation of innovative ideas across the organizations.

#### **4.4.3.2 Question 2: To what extent has the implementation of knowledge management enhanced your organizational performance? Justify**

This questions sought to discover the effect of KM implementation in ensuring that the organizational performance improves.

There were several views by the respondents in an attempt to appreciate influence of KM in their organizations that had a positive bearing on the organizational performance. However, they are still of the opinion that there is still much to be desired for to be able to measure the extent of KM on organizational performance.

The following themes were identified in attempt to respond to the question:

- Access to information
- Enhanced skills development
- Facilitate knowledge retention
- Promote collaborative way of working that promotes transversal operations

##### **4.4.3.2.1 Access to information**

Most of the participants alluded to the change on how information flow/knowledge exchange through the organizations has been encouraged by the culture of sharing. As a result during planning phase, plans and objectives developed are more informed. This is as a result of the adequate knowledge base that is relevant.

The other participant in support of this had indicated that KM had been critical for their planning, projecting their priorities, and capturing of knowledge base into their systems enabling us to ‘Smart up our business’.

The findings indicated that KM has had an influence in ensuring access to relevant information that can be used to promote efficiency within the organizations. According to Khamis, Suliman & Mohezar (2014), KM affords organizations an ability to acquire information and arrange it properly for easy access and re-use to expedite productivity and innovation.

#### **4.4.3.2.2 Enhanced skilled development**

There was a strong observation, especially in the projected field, that KM practices as they were adopted and accepted within the organizations, have facilitated several skills development initiatives such as mentoring and coaching. This has enabled learning within the organization to be inculcated through these informal set-up of skills enhancement sessions with experts, resulting in skills development, knowledge transfer and continuous learning that enhances the organizational performance.

One participant had this to say “*we need to create an interlocker so that information from centres of excellence will flow and inform each other, thus allowing the change of people behaviour, however KM has facilitated that*”. “*Experts here focus on mentoring young people in the same field, but now we need to do a cross functional process* “. (R8)

It has become evident in the findings that KM has been pivotal in enhancing organizational skills utilising different approaches to advance the organizational performance of which mentoring and coaching was identified as proof of the success of the KM practice. Literature studied expounds that collaborative learning as a knowledge transfer mechanism used to enhance organizational skills play a significant role in advancing organisational performance. Khamis *et al.* (2014) also concur by stating that KM is a process that enhances organizational skills and practices through sharing of knowledge with other people within the organization.

#### **4.4.3.2.3 Facilitate knowledge retention**

The participants reiterated the role that KM has played in facilitating the process of knowledge retention within the organizations. It has assisted in cutting costs as organizational intellectual assets, which is knowledge, now remains with the organization. The knowledge retention process has assisted in the enrichment of business standard operating procedures and review of business processes that resulted in efficient ways of working. Furthermore, the participants have indicated how KM has assisted in building a strong knowledge base for the organizations, from learning, sharing and retention.

An example was given of a CFO who had just retired from one of the organization, who before he exited, communicated all delegations. He made sure that his office manager understood all that was going on and where information could be found. All these processes were documented with the assistance of KM unit.

The findings in this section indicate the significance of knowledge retention for business continuity and innovation. Rudawska (2013) argues that organizational learning allows for harvesting of tacit knowledge to ensure it is accessible for organizational usage to ensure its survival and growth from lessons learnt in previous challenges experienced by organizations. Knowledge retention is a process that ensure that critical knowledge of the organizations operations is shared and accessible beyond the exit of knowledge source/experts in the organization to ensure sustainability through efficient and effective processes for organizations to achieve its goals (Bessick & Naicker, 2013; Becerra-Fernandez & Sabherwal, 2014).

#### **4.4.3.2.4 Promote collaborative way of working that promotes transversal operations**

There has been a general feeling by respondents that over years government has been engulfed by a silo way of working which had resulted in the recurrence of same mistakes as there was no culture of sharing thus inhibiting knowledge transfer. However, the support and buy-in by leadership in the entrenchment of KM practices in the organizations has resulted in a more structured and collaborative way of working. The establishment of committees which serve as communities of

practice promote a transversal way of tackling organizational objectives consequently ensuring a cost-effective way of achieving organizational objectives.

This is what one participant had to say:

*“KM has promoted Transversal management that flows into transversal operations in our organizations”.*  
(R5)

The findings in this theme demonstrate how culture change can promote collaborative efforts that results in organizational learning. According to Mkhize (2015) the only way that these ideas can be converted is when it is shared through collaborative efforts allowing the flow of knowledge and transfer of competence within a group of workers in an organization. Perez-Soltero and Soto (2017) are also of the view that a culture promoting collaboration enhances professional and personal development, therefore allowing for the creation of innovative ideas across the organization.

#### **4.4.3.3 Question 3: Identify and discuss the strategies you regard as imperative for successful implementation of knowledge management**

This question sought to identify strategies that are important for successful implementation of KM.

Several topical areas of focus were raised by participants as the strategy that can be employed in government for successful implementation of KM. The following were identified as themes in answering the question:

- Knowledge management strategy
- Communication plan
- Change management strategy
- Government-wide retention strategy

#### **4.4.3.3.1 Knowledge management Strategy**

Some of the respondents felt strongly that for uniformity and consistency government should come up with a KM strategy that will promote learnings across the public service institutions. The need to introduce learning mechanisms that will encourage knowledge transfer and skills development within the organization were also alluded to. This strategy ought to ensure that it promotes transversal operations and integration as indicated by one of the respondents, mentoring and coaching was raised as one of the key mechanisms that should be promoted.

It is clear from this finding that for KM to be implementable, a government- wide strategy is imperative to facilitate consistency and bring to the fore the key principles of KM that will build government into a learning institution. According to Lawler and Sillitoe (2013) organizational learning is a key component for business continuity and reflection. Furthermore, learning facilitates the improvement of organizational knowledge as organizational knowledge is the result of learning that expedite innovation, therefore it is important in government for improved services (Rudawska, 2013).

#### **4.4.3.3.2 Communication plan**

The participants in their engagements with the researcher emphasised the importance of advocating the value proposition of KM within the organizations as critical. KM needs to be recognised as a strategic asset of government, this is what the participants had to say and this can only be done through comprehensive communication plan.

Quoting one participant: *“If, as departments are very serious about KM, how do you speak to organization and ensure how people realise that as an organization you need to highlight what KM will mean for departments and for officials how it will enhance their work”*. (R5)

The findings here indicate the importance of having a clear and comprehensive communication plan that will advocate the relevance of KM practices as part of the tools used to enhance good governance. According to Dewah and Mutula (2014), public service is characterised by its

principles of good governance and KM supports these by facilitating a free flow of knowledge exchange for organizational learning and planning.

#### **4.4.3.3 Change management strategy**

There was a general indication by participants for the need to come up with continuous change management strategies in government that will facilitate a cultural change that will result in positive change of behaviour and mind set of employees. As a result KM practices will be adopted without fear and people will be trusting enough to exchange knowledge.

One of the respondents alluded to the formulations of forums or committees that will support change within the organization as contributor to culture transformation.

Participant 7 has this to say “*Changing people’s mind-set assisting them to see the bigger picture, fear of losing their jobs once you bring in tools people think they will lose their jobs*”

The findings indicate the importance of change management strategy to expedite a positive culture for learning. According to Chang and Lin (2015), organizational culture plays a key role in ensuring that KM processes are implemented for facilitating the transfer of knowledge that results in learning. Furthermore, culture determines organizational effectiveness and efficiency (Brajerczak, 2016 and Omotayo, 2015).

#### **4.4.3.4 Government-wide retention strategy**

There was a general consensus amongst participants of the need to have a retention strategy in place that will assist in ensuring that the intellectual asset of government which is knowledge remains with the public service and it is easily accessible for business continuity. The importance of harvesting knowledge from experts was also recognised as significant as it will assist in ensuring

that tacit knowledge accumulated over years by these people is harvested and still remains within the organization.

*Retentions strategy need to be in place that is very clear on skills transfer especially for new incumbents.* (R1)

A further need for a system to retain know edge for easy access was indicated by participants.

*“For KM strategy fundamental is the system that you can use to store, collaborate and share information”.* (R12)

These findings indicate the importance of having knowledge retention strategy as part of the organizational strategy in order to enhance skills transfer through the employee’s work cycle in the organization. This will enhance skills within the organization without incurring training cost whilst getting in-depth understanding of the operations that are not documented (tacit knowledge). Dewah and Mutula (2014) claims that the effective management of both the tacit and explicit knowledge for knowledge retention in the public sector is pivotal as it facilitates corporate governances, ensuring that the mandate of government is fortified. Also, knowledge retention is a process of KM that ensures that organizations retain its intellectual capital which is knowledge that has been acquired by its organization’s knowledge workers as they exit the organization (Agarwal & Islam, 2015).

## **4.5 Conclusion**

The result of the study were presented in line with the research objectives to make sure that all questions of the research were attended to. Manual thematic analysis of the findings was done and out of eight questions twenty five themes emerged. As a result providing a comprehensive analysis of each objective. The findings were aligned with relevant literature. An attempt on this chapter was made to ensure that the findings were aligned with objectives. The following chapter presents the conclusion and recommendation for the study.

## CHAPTER 5

### RESEARCH CONCLUSION AND RECOMMENDATION

#### 5.1 Introduction

This chapter presents the conclusion and recommendations of the study. The aim of this study was to determine how the application of KM has succeeded in driving service delivery efficiency in the selected departments. The implementation of KM in the public service has progressed without an agreement on a framework of standards, systems and commonly accepted definitions and terms. This has contributed to challenges on clarity of the KM concept and this affects, amongst others, modalities of implementation in the public service, consequently leading to weak integration of KM with the institutional functioning process. A qualitative approach was adopted in conducting this study. Semi-structured interviews were conducted with officials from the two selected departments. Data analysis was embarked on through thematic analysis, and the presentation of the results was based on the objectives of the study. This was done to ensure that the results were aligned with the objectives of the study.

Although the context of the study was premised on the implementation of KM for effective and efficient delivery of services, the findings highlighted the key principles of KM that need to be taken into consideration for effective implementation in government institutions.

The study has provided insights on the effect of KM on organizational efficiency in public service organizations, what factors are key in ensuring that KM becomes the way of doing business in government and the extent to which these factors have ensured that KM practices are embedded in organizational strategy and operation to enhance effective and efficient service delivery. The objectives of the study were:

- i) To determine the effect of KM on organizational efficiency in public service organizations;
- ii) To explore the factors that affect the successful implementation of KM in public service organizations;

iii) To assess the extent to which the factors affect the implementation of KM in public service organizations.

The recommendations focus on the key findings of the research.

## **5.2 Key findings**

The summary of the findings are presented consistent with each objective that the researcher had set out for the study. The deployed approach will show the key findings for each objective.

### **5.2.1 Objective 1: To determine the effect of knowledge management on organizational efficiency in public service organizations**

It is evident from the findings that KM is a process that promotes the management of organizational knowledge to ensure public service learning that will enhance effectiveness. However, it is important to highlight the processes that are involved in KM as indicated in the findings which include gathering, creation, classification, storage and dissemination of knowledge so as to create organizational memory. This cannot happen without the organization's human capital, which is key in knowledge creation and use for effective productivity. The process identify the *how* part of the management process but the key is the human capital which drive the KM process as it identifies the relevant stakeholders in whom knowledge resides and from whom it needs to be harvested.

The findings also concur on the importance of knowledge harvesting and retention as critical elements of organizational effectiveness in building organizational intellectual asset in line with other research findings cited in literature review. Therefore the essence of KM is to create a learning organization to ensure that business objectives are realised and business continuity confirmed. This approach ensures enhanced skills development within the organizations that is supported by a conducive culture of sharing. Furthermore, with these KM processes in place, an effective organizational decision-making is inspired, leading to informed organizational planning that guides KM strategy as well as overall organizational strategy.

### **5.2.2 Objective 2: To explore the factors that affect the successful implementation of knowledge management in public service organizations**

The findings depicted that without leadership buy-in and support, KM will not be exploited as a strategic asset of the organization that will assist in driving effective and efficient processes on service delivery. The importance of KM as strategic assets enables the organization to make informed decisions based on knowledge relevant in addressing the organizational challenges. Moreover, in all organizational processes this strategic assets affirms business continuity that enhances innovation.

The findings confirm the importance of organizational culture in ensuring that KM practices are embedded in the public service organizations researched. KM is key for organizational learning and the conducive culture of sharing facilitates the free flow of information as alluded in the findings. This culture furthermore promotes knowledge exchange which enhances skills transfer for organizational development. This is evident in the findings of Chang and Lin (2015) where they concurred that organizational culture plays a key role in ensuring that KM processes are implemented for facilitating the transfer of knowledge that results in learning. The transfer of skills is significant in ensuring that the public service organizations become efficient as good practices are shared, resulting in enhanced business processes that result in improved performance.

The findings further confirm the importance of technology and technological platforms as an enabler that expedites the implementation of KM practices for increased government productivity. Technology on its own cannot drive the organizational strategy, however it provides a platform that expedite the process.

The role of technology in enabling retention, sharing and dissemination of knowledge, much as it is important on its own, cannot be used outside or without human capital. The current trend highlight technology more than human capital. However, the studies conducted clearly indicate its supportive role as one of the key pillars of KM. Knowledge creation as one of the essential

elements for organizational survival, is dependent on human capital and not on technology, even though the technological platform or systems assist in ensuring its discovery, storage, accessibility and dissemination. Much as technology is important, it is a narrow view as it cannot drive organizational strategy on its own.

### **5.2.3 Objective 3: To assess the extent to which the factors affect the implementation of knowledge management in public service organizations**

It has become evident from the findings that the leadership buy-in and support has greatly impacted the entrenchment of knowledge positively in the public service organizations studied, resulting in collaborative efforts that promotes improved performance. The employees within these organizations are getting accustomed to the idea of sharing information and knowledge that allows free flow of information. Relevant knowledge that is key for the organizations has now become easily accessible as indicated in the findings. This is significant for decision-making that is informed by relevant knowledge in order to address service delivery challenges. Consequently, though the maturity of KM in government these organizations, as indicated in the findings, are still at infancy, yet the practice is progressively becoming a standard in organizations that have embraced KM and have sufficient leadership buy-in and support.

The findings concur with the significance of knowledge retention for business continuity and innovation. The intellectual capital as a strategic asset of the organization continues to be a critical component of business continuity in the findings as it allows for organizational learning. Learning organizations are characterised by their ability to learn from the experiences shared, practices and methodologies resulting in the empowerment of the organization's human capital. Subsequently these collaborative efforts empowered by the culture change facilitates innovation and improved productivity.

The acknowledgement of the need for a government-wide strategy by the findings is evident in the studies as cited in the literature review. It is apparent that for the public service to ensure

consistency and in building learning institutions there are several elements that need to be considered as mentioned in the findings. One of the key elements is ensuring that the KM principles are intensified in the government's day-to-day operations in building government knowledge capital.

## **5.3 Recommendations**

### **5.3.1 Understanding of knowledge management and value proposition in government**

It has been realised that there are various interpretations on what KM is, however general consensus is on the management of knowledge. It is recommended that KM in the context of government be defined in line with the mandate of government on service delivery which is outlined in National Development Plan. The NDP demonstrates government's commitment to building a capable and developmental state. Central to it is a capable, effective and efficient public service. It highlights that the South African public service has an obligation to develop skills and knowledge to be able to meet its economic and societal needs. Moreover the knowledge generated over time ought to assist government in ensuring efficiency and continuity. Furthermore, it states that employees in the public sector should be empowered through effective training so as to ensure a shared understanding of basic principles that enable employees to develop a knowledge base. Subsequently allowing for a learning environment where knowledge exchange takes place as challenges and quick wins are discussed.

### **5.3.2 Development of government-wide strategic Framework**

The development of a government-wide strategy/framework is recommended. The strategy should ensure that the key elements of KM are incorporated as a result specifying the following elements as key drivers of knowledge management:

- i. **Leadership** as essential and influential strategic partner in driving the successful implementation of KM in government departments. The process is then an integration of

KM in government business processes which is quite crucial to inform both structural and procedural aspects. This can be facilitated at strategic leadership level.

- ii. **Human capital** as a key driver of KM in enhancing business strategies. KM is people-centred and it is critical that public servants have critical KM competencies to utilize knowledge in carrying out their work. It is only when the right skills, competencies and expertise exists that government will be able to create, classify, store and manage knowledge towards achieving government objectives and goals.
- iii. The **organizational capital** which is the records/contents of the organization. KM activity encompasses decision-making and this is informed by the organizational content. The identification knowledge, its origins and users and how it has to be classified and categorized assist in enhancing organizational performance.
- iv. The **system/Technology** that serves as KM enabler is also key in facilitating business processes. It is essential for knowledge storing, sharing and exchange within the department and across government departments.

### 5.3.3 Strategic leadership

It is recommended that the leadership in government should become KM champions. They should also pursue the following in an attempt to facilitate the effective implementation on knowledge management:

- i. Allow for flexibility, meaning that leadership should embrace new idea and promote collaboration.
- ii. Inspire strong culture that encourages shared beliefs and values to support information flow and knowledge sharing to ensure that the public service is a learning institution.
- iii. Promote cooperative efforts and inspire performance.

- iv. Ensure accountability that encourage innovation to prove advantageous to organization.
- v. Promote cooperative efforts that inspires performance such as learning platforms.

#### **5.3.4 Human capital and learning organizations**

As a recommendation, government organizations should consider human capital as the first level of KM delivery as they develop strategy. Human capital possess the organizational intellectual capital which is the tacit knowledge accumulated over time through experience that needs to be harvested and ought to remain in the organization for business continuity when people exit. The development of human capital facilitates passion and gives confidence that enhance organizational performance. This development assist government employees to acquire relevant knowledge that will result in empowerment and encouraging innovation that will support organizational effectiveness and efficiency.

#### **5.3.5 Organizational culture addressing silo working**

The departments studied have attempted to ensure that the culture of sharing within the organizations is embedded in how work is done, resulting in facilitating integration and collaborative ways of working. It is therefore recommended that continuous change management strategy ought to be part of the action plan of government. This will address the following:

- ensure that there is a conducive culture that promote free flow of information as opposed to the silo-way of working
- enhancement learning organizations
- promotion of knowledge exchange if government wants to be effective and efficient in service delivery.

### **5.3.6 Technological systems**

It is imperative for government departments to invest in technological systems such as the knowledge portals that are government-wide compactable. This will assist with knowledge retention, sharing and dissemination of knowledge created and enhance integration and collaborative ways of working. It is essential to note that technology plays a supportive role in KM processes.

### **5.4 Potential and constrains of the proposed recommendation**

For the public service to uphold its vision of being a developmental state, it is key that it considers the above recommendations in order to ensure that KM is the way of operation. Government has a potential to implement the recommendations as managers and staff members of some of the departments practicing KM have a general understanding of what it is and what it seeks to achieve. Leadership in the studied department have realised the importance of leading by example, therefore influence the change in organizational culture that has resulted in transformation. The enrichment of informed planning supported by KM is eminent as it already facilitates learning that promotes collaboration and integration by sharing in the departments studied.

The researcher is aware that the proposed recommendations have a financial bearing on the department's budgets in arears. However, government needs to allocate KM budgets to be able to remain competitive and provide efficient service delivery. It is key also to note that the training of the department's employees on the new understanding of KM that is in line with the government's mandate of service delivery has a financial implication. Nonetheless, this can be possible with proper budgeting allocation towards this project. The change management strategy may not yield the desired due to possible resistance by the human capital towards the culture of sharing that may negatively impact the goal to promote a learning organization. However, in the findings there is an indication that this constraint can be managed by the introduction of knowledge sharing platforms which is a phenomenon that is happening in other departments on a smaller scale. This

would need to be widespread and structured in a manner that will benefit the human capital as well as the creation of a conducive learning environment.

The minimal understanding of the concept of KM by leadership will result in organizations that will not be lead and supported in the development of a KM strategy. In addition if the leadership's understanding of KM is premised within the broader proposed understanding of KM in line with the NDP, it will be difficult for the organizations to come up with a strategy that will be effective. However, the empowering of leadership on leadership can be resolved through government's compulsory executive induction programme.

It is important to note that the proposed recommendations may not be exhaustive and may not meet the requirements of individual departments. However, these recommendations serve as critical base in the implementation of key principles of KM as there are dynamics in the implementation of KM in government.

## **5.5 Conclusion**

KM is key in facilitating organizational learning. The researcher believes that the implementation of the proposed recommendations would have a significant impact in enhancing the implementation of KM as a strategic practice in government departments. The study aimed to determine how the application of KM has succeeded in driving service delivery efficiency in the Western Cape Government department of Transport and Public Works and National Treasury. The research demonstrated that the implementation of KM has indeed succeeded in facilitating effective and efficient service delivery in the two studied government departments.

The following were identified as key drivers of successful implementation of knowledge management: leadership, human capital, organizational capital and technology.

## **5.6 Recommendations for future studies**

The study investigated how the application of KM has succeeded in driving service delivery efficiency in one national and one provincial department. A quantitative study could be conducted in all government departments to determine their understanding of KM and how they see it contributing to their organizational effectiveness.

The study emphasised the role of leadership buy-in and support in assisting the organizations to utilise KM as a strategic asset of the organization that will assist in driving effective and efficient processes on the delivery of services. It was established that leadership buy-in and support resulted in collaborative efforts that promoted improved entrenchment of KM in the studied public service organizations. Future studies should therefore be expanded, to all government departments to determine if there is any leadership buy-in and support the implementation of KM in government.

The findings of this study endorsed the importance of a conducive culture for sharing in facilitating the free flow of information. Moreover, its importance in ensuring that KM practices are embedded in the public service organizations. In a subsequent study a quantitative approach can be used to determine whether the existing culture in government is conducive to support organizational learning.

Harvesting and retention of critical knowledge is associated with business continuity and innovation. Intellectual knowledge is a strategic asset for organizations. Further studies should explore whether there are systems in place in government departments to facilitate knowledge retention.

Future studies could also explore the importance of human capital in ensuring effective implementation of knowledge management.

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Informed Consent Letter
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**UNIVERSITY OF KWAZULU-NATAL  
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP**

**MCLS Research Project  
Researcher: Sebenzile Zibani (0732651587)  
Supervisor: Dr Emmanuel Mutambara (031 260 8244)  
Research Office: Ms P Ximba (0312603587)**

Dear Respondent,

I am, Sebenzile Zibani a Masters student in Leadership and Management, at the Graduate School of Business and Leadership, of the University of KwaZulu-Natal. You are invited to participate in a research project entitled ***THE APPLICATION OF KNOWLEDGE MANAGEMENT PRACTICES IN PUBLIC SERVICE ORGANISATIONS***

The aim of this study is to determine how application of Knowledge Management has succeeded in driving service delivery efficiency in the in Department of Transport and Public Work (Western Cape provincial Government) and National Treasury (National Government).

Through your participation, I hope to understand how the implementation of knowledge management in your organisation has contributed in enhancing service delivery in an efficient and effective manner. The results of the interview are intended to contribute in enhancing the institutionalization of knowledge management in the Public Service for effective and efficient service delivery.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey/focus group. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Graduate School of Business and Leadership, UKZN.

If you have any questions or concerns about participating in the interview or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The interview should take about 45 minutes to an hour. I hope you will take the time participate in the interview.

Sincerely

Investigator's signature \_\_\_\_\_ Date \_\_\_\_\_

**APPENDIX B**

UNIVERSITY OF KWAZULU-NATAL  
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

MCLS Research Project  
Researcher: Sebenzile Zibani (0732651587)  
Supervisor: Dr Emmanuel Mutambara (031 260 8244)  
Research Office: Ms P Ximba (0312603587)

CONSENT

I..... (Full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I hereby consent / do not consent to have this interview recorded.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT

DATE

.....

This page is to be retained by the researcher

**UNIVERSITY OF KWAZULU-NATAL  
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP**

**MCLS Research Project  
Researcher: Sebenzile Zibani (0732651587)  
Supervisor: Dr Emmanuel Mutambara (031 260 8244)  
Research Office: Ms P Ximba (0312603587)**

**THE APPLICATION OF KNOWLEDGE MANAGEMENT PRACTICES IN PUBLIC SERVICE ORGANISATIONS**

**Interview Guide Questions**

**a) To determining the effect of knowledge management on organisational efficiency in public service organisations**

1. What is your understanding on knowledge management?
2. Explain the role played by knowledge management in ensuring organisational effectiveness?
3. Could you please share with me your understanding of the role knowledge management in your organisation and its role in achieving organizational strategy?

**b) To explore the factors that affect the successful implementation of knowledge management in public service organisations**

4. Identify and discuss the factors that affect the implementation of knowledge management in your organisation?
5. Of the factors identified above, could you please identify the most critical factors that you regards as key and justify your answer?

**c) To assess the extent to which the factors affect the implementation of knowledge management in public service organisations**

6. To what extent has factors alluded to above reinforce the institutionalization of knowledge management in your organisation?
7. To what extent has the implementation of knowledge management enhanced your organisational performance , justify
8. Identify and discuss the strategies you regard as imperative for successful implementation of knowledge management?
9. Do you have recommendation that you can make towards the enhancements of knowledge management in the public service.

ETHICAL CLEARANCE APPROVAL LETTER



28 June 2017

Ms Sebenzile Khanyisiwe Lindelwa Zibani (213569822)  
 Graduate School of Business & Leadership  
 Westville Campus

Dear Ms Zibani,

Protocol reference number: HSS/0713/017M  
 Project title: The application of knowledge management practices in public service organisations

**Full Approval – Expedited Application**  
 In response to your application received on 07 June 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and FULL APPROVAL for the protocol has been granted.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

 (Chair)

/ms

Cc Supervisor: Dr Emmanuel Mutambara  
 Cc Academic Leader Research: Dr Muhammad Hoque  
 Cc School Administrator: Ms Zarina Bullyraj

Humanities & Social Sciences Research Ethics Committee  
 Dr Shenuka Singh (Chair)  
 Westville Campus, Govan Mbeki Building  
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# THE APPLICATION OF KNOWLEDGE MANAGEMENT PRACTICES IN PUBLIC SERVICE ORGANIZATIONS

*by* Sebenzile Zibani

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