

KNOWLEDGE MANAGEMENT AND PARLIAMENT CONTENT MANAGEMENT SYSTEM

By

Azwinndini Phillys Sinyegwe

*The research report submitted in partial fulfilment of the requirements for the degree of
Master of Management (Public and Development Management) in the
Faculty of Commerce, Law and Management,
University of the Witwatersrand*

Supervisor: Mr Khuliso Kennedy Maimela

May 2014

DECLARATION

I declare that this research titled **Knowledge Management and Parliament Content Management System** is my work and it has not been previously submitted for a degree or any other examination at this or any other institution and that all the sources that I have used and quoted have been acknowledged and indicated by means of complete references.

Signature-----

Date.....

DEDICATION

To my lovely boys Fhululedzani Matambela and Mulalo Tshilidzi Matambela whom God entrusted me to guide and nurture: - To you I say “Pfunzo ndi tshiala”. May you grow and understand the value of education and cherish it. Proverbs 4:7 says, “Wisdom is the principal thing; therefore get wisdom and with all thy getting get understanding”.

ACKNOWLEDGEMENT

I would like to extend my sincere gratitude to my supervisor Mr Khuliso Kennedy Maimela for supporting me throughout this study. This work was a success because of the support and valued contributions from colleagues, friends and family. Above all, I give thanks to the Almighty God for giving me wisdom and strength to work on the research report from the beginning to the end.

Abstract

The Globalisation of business, the shift from production-based to a knowledge-based economy, the growth of information communication technology (ICT), the strive to become learning organizations and the emergence of the need for knowledge workers have made Knowledge Management (KM) practice a must across all types and levels of organizations today (Chong, 2005). Organizations manage knowledge because if they do not, it has detrimental effects especially when employees leave organizations. Du Plessis (2005) indicates that when employees leave organizations they are likely to leave with valuable organizational knowledge. Successful KM has significant benefits for organizations. It enables organizations to harness this resource and continue to benefit from it even when employees have left the organizations. To successfully implement KM initiatives, an organization must take heed of KM success factors because absences of these factors lead to failure of KM initiatives.

The purpose of this research is to explore the factors that are driving or impeding the effective implementation of the Parliament Content Management System (PCMS), as a KM initiative in the Parliament of the Republic of South Africa. The study has found that if leadership is not fully committed on the KM issues, KM initiatives will hardly succeed in an organization as it is the leadership's responsibility to come up with the KM implementation strategies; they have to ensure that employees are motivated and that there is a culture of knowledge sharing in the organization.

The thesis consists of five chapters. Chapter 1 deals with the background of the study, introduction to the problem and the relevance of the study. Chapter 2 reviews literature on push factors for successful implementation of knowledge management initiatives. Chapter 3 discusses the research methodology. Chapter 4 analyses the data. Finally, chapter 5 deals with the conclusion of the study with a number of

recommendations to assist LOD in ensuring that PCMS, as a KM initiative achieves its intended objectives.

Table of Contents

CHAPTER 1.....	1
Introduction and Background of the Research Study	1
1.1 Introduction	1
1.2 Background.....	2
1.3 Problem Statement	6
1.4 Purpose of the study.....	7
1.5 Significance of the study	7
1.6 Research questions	7
1.7 Objectives of the study.....	8
1.8 Propositions of the study.....	8
1.9 Limitations of the study	8
1.8. Chapters outline.....	8
CHAPTER 2.....	10
Literature Review	10
2.1 Introduction	10
2.2 What is knowledge.....	13
2.2.1 Types of knowledge	14
2.3 Knowledge management	15
2.4 KM in public sector.....	20
2.5 Elements to be considered for KM in an organization	21
2.5.1. People.....	23
2.5.2. Technology	24
2.5.3 Processes	24
2.6 Knowledge Management Framework.....	25
2.7 Key success factors for KM Initiatives proposed by Lowe	29
2.7.1 Leadership.....	29

2.7.2	Strategy	32
2.7.3	Culture/ Value Systems	33
2.7.4	People	34
2.7.5	Technology	37
2.8	Enterprise Content Management (ECM)	38
2.9	PCMS as an Enterprise Content Management System	40
2.10	Security of Data on PCMS	43
2.11	Economics of KM and PCMS	43
2.12	Conclusion	43
CHAPTER 3.....		46
Research Methodology		46
3.1	Introduction	46
3.2	Research design	46
3.2.1	Case Study	46
3.3	Research approaches	48
3.3.1	Mixed method approach	48
3.3.2	Qualitative research approach	48
3.3.3	Quantitative research approach	49
3.4	Population of study	49
3.5	Data collection	49
3.5.1	Data collection methods	49
3.5.2	Sampling	52
3.5.3	Data analysis and interpretation	53
3.5.4	Validity	53
3.5.5	Reliability	54
3.5.6	Pilot Study	54
3.6	Ethical consideration	55

3.7	Timeline of the Study	55
3.8	Conclusion	56
CHAPTER 4.....		57
Data Interpretation and analysis.....		57
4.1	Introduction	57
4.2	Data analysis	57
4.2.1	Demographics of the respondents	57
4.2.2	PCMS training attendance	60
4.2.3	Use of PCMS	63
4.2.3	Objectives of PCMS	66
4.2.4	Contributory Factors	68
4.3	Conclusion	74
CHAPTER 5.....		75
Summary of findings and recommendations		75
5.1	Introduction	75
5.2	Findings of the study.....	75
5.3	Recommendations.....	78
5.4	Conclusion.....	79
REFERENCES		81

List of tables

Table 1: Proposition of the study.....	8
Table 2: KM Success factors.....	12
Table 3: Classification of access rights to PGMS documents..	42
Table 4: Timeline.	56
Table 5: Demographic information	57
Table 6: PCMS Training attendance	60

Table 7: Use of PCMS.....	63
Table 8: Usage of PCMS per Section	65
Table 9: Intended objectives of PCMS.....	66
Table 10: Contributory factors.....	68

List of figures

Figure 1: Bill processes.....	4
Figure 2: Reasons for KM	18
Figure 3: KM elements	23
Figure 4: Lowe's KM implementation model.....	28
Figure 5 ECM activities and knowledge generation.	39
Figure 6 : The modules of typical ECM application.....	40
Figure 7: Gender of respondents	58
Figure 8: Years of working experience of respondents.....	58
Figure 9: Total percentage of respondents per Section	59
Figure 10: Attendance of PCMS training	61
Figure 11: Frequency of PCMS training attendance	61
Figure 12: Type of training attended.....	62
Figure 13: Year in which training was attended	62
Figure 14: Reasons for not attending PCMS training	63
Figure 15 : Respondents with or without PCMS on their computers.....	64
Figure 16: PCMS usage	64
Figure 17: Frequency of PCMS usage	65
Figure 18: Number of users per section May and June 2013	66
Figure 19 PCMS and knowledge sharing	67
Figure 20: PCMS and knowledge retention	67
Figure 21: PCMS and access to information	68

Figure 22: Understanding why PCMS was implemented.....	69
Figure 23: Level of PCMS training.....	69
Figure 24: Value of PCMS to the users	70
Figure 25: PCMS as a technological tool to foster knowledge retention	70
Figure 26: PCMS is user friendly.....	71
Figure 27: Managers' support in PCMS usage	71
Figure 28: Knowledge sharing encouragement from LOD.....	72
Figure 29: Rewards for knowledge sharing	73
Figure 30: Culture of knowledge sharing	73
Figure 31: Understanding of KM	74

Appendices	92
Appendix A: Letter to the Secretary to Parliament.....	92
Appendix B: Letter to the Respondents.....	94
Appendix C: Survey Questionnaire	96
Appendix D: Pilot Study Questionnaire	100

Acronyms and abbreviations

PCMS	Parliament Content Management System
LOD	Legislative and Oversight Division
KM	Knowledge Management
ECM	Enterprise Content Management
NA	National Assembly
NCOP	National Council Of Provinces
ROI	Return on Investment

Chapter 1

INTRODUCTION AND BACKGROUND OF THE RESEARCH STUDY

1.1 Introduction

This chapter introduces the study. It presents the problem statement, significance of the study, aims and objectives, research questions, assumptions and format of the study.

Societies have recognised the importance of knowledge and its fundamental value for centuries. Its history can be traced back to World War II (Abass, Hayat, Shahzad and Riaz, 2011). Effective management and the sharing of knowledge within communities and organizations are still a mystery due to the challenges associated with knowledge capturing and distribution (Hester, 2011). Though extensive studies have been conducted on Knowledge Management (KM) and its importance has been highlighted, various organizations are still struggling to implement the concept (Wong and Aspinwall, 2004). This research study focuses on the way in which Knowledge Management (KM) initiatives are being utilised in the Parliament of the Republic of South Africa, with special reference to the Parliament Content Management System (PCMS). Currently, the Parliament of the Republic of South Africa is still at the Information Management stage (Parliament of the Republic of South Africa, 2009). Information Management as cited by Friké (2009), deals with the management of organised data. While Davenport and Prusak (1998:5) in Schwartz, Divitini and Brasethvik (2000:171), see knowledge as “a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information”. Schwartz, Divitini and Brasethvik (2000) add that KM categorises knowledge within an organization, determines how it will flow, through which channels and when. The institution considered the move from Information Management to KM (Parliament of the Republic of South Africa, 2009). PCMS has been identified as one of the KM initiatives to assist the Parliament of the Republic of South Africa towards the realisation of KM by the institution.

1.2 Background

Daud and Yusuf (2008:169) define “knowledge as a primary commodity”. Whether an organization is a public or a private organization, running it without knowledge will be practically impossible. Institutional knowledge is categorised into tacit and explicit knowledge (Cong and Pandya, 2003). De Brun (2005:6) defines explicit knowledge as “knowledge that can be captured and written down in documents or databases”. Cong and Pandya (2003:27) see explicit knowledge as “formal and systematic”. Karemente, Aduwo, Mugejjera and Lubega (2009) view tacit knowledge as personal and hard to articulate. It is coupled with the skill and experience that an individual has. Proper management of these types of knowledge is crucial if an organization wants to provide its services effectively. The Parliament of South Africa recognised in 2006 that the current paper-based document and record management process in Parliament does not meet certain key legislative requirements, namely of the National Archives Act and Access to Information Act. Parliament realised the importance of implementing a reliable and effective solution as soon as possible. PCMS was introduced in 2007 to assist the Parliament of the Republic of South Africa with managing its explicit knowledge, as critical documents were being lost and this was hampering the manner in which Parliament conducts its business. PCMS’s benefits include, amongst others, a greater ability to share information across the organization by reducing the amount of paper-based documentation and by working in a fully integrated electronic environment; information sharing can occur more easily and quickly, so that the core business processes are able to run more smoothly (Parliament of the Republic of South Africa, 2006).

Parliament of the Republic South Africa (2006) indicates that the excellent search facilities within PCMS enable Parliament employees to find the information they require to operate within seconds, instead of putting up with long lead times to obtain information. The centralised document repository enhances the ability of Parliament to store information with a lesser risk of it getting lost.

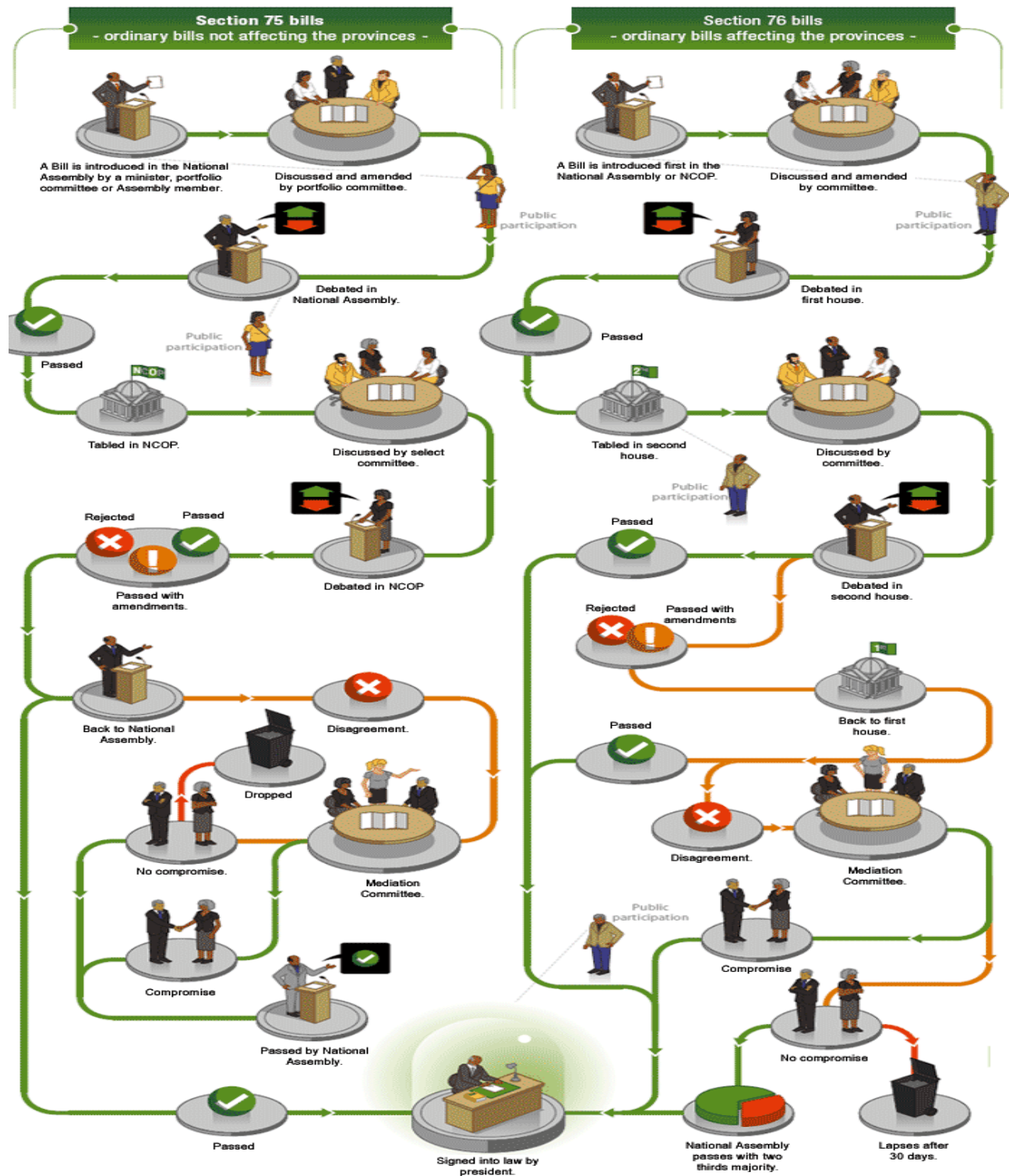
It also enhances the ability to monitor, support and track information as it flows through the Parliamentary processes; when Bills are being processed, for example, PCMS offers the following:

- All documents related to a specific piece of legislation are stored centrally and it is easy to access them.
- A Bill's progress can be tracked and monitored easily.
- The history of action taken on the document is tracked.
- Collaboration of various parties involved in the progress of a Bill is easily facilitated (Parliament of The Republic of South Africa, 2006).

Parliament of the Republic of South Africa (2006:20) reveals that “as soon as a new bill is detected, the workflow will create a collaborative space on the web server, copy relevant documentation and allocate users and notifications for them to attend to the document. The Hummingbird Collaboration application allows users to interact with each other and documents in order to reach the common goal”.

Various stakeholders are involved in the legislation process, namely the Bill initiators, Portfolio or Select committee, State Law Advisors etcetera. Coordination and knowledge sharing between these different stakeholders are essential to inform the final product. PCMS offers a space where knowledge can be shared easily amongst different stakeholders. Below is the picture of the lifecycle of the Bill.

Figure 1: Bill processes



Source: http://www.parliament.gov.za/live/content.php?Item_ID=95

Daud and Yusuf (2008:169) contend that authors such as Grant (1996) and Prusak (2001) as well as Ahmed, Lim and Low (2002) view KM as the base of an organization's competitiveness in the global economy. They also argue that the ability to manage an organization's knowledge ultimately results in a smarter and more capable organization which enables it to manage its assets cheaper, better and more effectively than its competitors.

Globalisation, knowledge economy, information development, communication and technological innovations are the key drivers behind changes in the political and economic environment globally. This change does not only bring challenges but also opportunities for both the private and the public sector (Cong and Pandya, 2003). The above-mentioned author denotes that the way in which an organization acquires, preserves and shares its knowledge will assist it to provide an outstanding service in this ever-changing environment.

The research focused on the Legislation and Oversight Division (LOD), as this is the most important division regarding explicit knowledge in the Parliament of the Republic of South Africa. It is the support base of the core business of Parliament. Parliament's principal role is to make legislation, as it is the Legislative Arm of the State. The Hansard text, which is the edited verbatim reports of proceedings and all debates in both Houses of Parliament and Bills, is located in this division. Critical personnel like researchers, committee secretaries, content advisors and language practitioners that assist members of Parliament directly, reside in this division. Good KM practices in this division can enhance Parliament's efficiency in running its business. The division has the following sections:

- 🚩 Language Services Section has four units, namely the Interpreting unit, which renders an interpreting service for debates in both Houses of Parliament - the National Assembly (NA) and the National Council of Province (NCOP) - and during the oversight visits of Parliament to the provinces; the Reporting unit deals with the transcription of debates in both Houses, and the recorded proceedings during Parliament's oversight visits; the Translation unit deals with the translations of all documents including bills in the institution; while the Publication unit publishes "Hansard".

- ✚ Information Services Section is responsible for the running of the library and the Research unit.
- ✚ The Committee Section is the support base of both the NA and the NCOP's committees in Parliament. When a bill is introduced in Parliament, it is referred to a Parliamentary Committee that is tasked with oversight over the government ministry that has introduced the bill, working together with the Bills Office.
- ✚ Leader of Government Business Section: It is the responsibility of this section to facilitate intergovernmental relations and cooperative governance and also to facilitate the legislative and oversight processes of Parliament and the Executive. (<http://faranani.parliament.gov.za/main/content.aspx?pageId=f0701bb4-c3bb-4dfe-b2b3-148dcfdec902&mp=5>)

1.3 Problem Statement

Knowledge has become a critical tool for the sustained growth of any organization. Organizations, both private and public, are aware of the value that knowledge has for organizations to be competitive - therefore even when hiring employees they tend to focus on “brains” rather than “hands” (Wong, 2005:26). Realisation of knowledge as a business concept has grown and organizations are realising its importance to sustain growth. Singh and Kant (2008) see KM as a necessity not an option. If knowledge is managed well, it elevates the organization to new heights. Chatzkel (2003); Davenport & Prusak, (1998) cited by Ahn, Park and Jung (2009:388-398) further indicate that “KM can be an organizational strategy and a process not only to solve challenges but also to create knowledge within organizations”. It does this by providing an organization with an organizational plan to implement new intervention strategies. Updated technologies are fundamental for the success of these strategies and knowledge distribution.

PCMS was installed at the Parliament of the Republic of South Africa in 2007. Group and individual training was and is offered to all employees, and it is an on-going process. The system is however hardly being used in some sections within the institution; the underlying reasons for the ineffective usage of PCMS are unknown. Parliament of South Africa (2006:6) avow that the overall aim of PCMS is to make sure that critical documents are stored, accessed and that information is shared

easily within the entire institution - in order to break down the silos functionality of Divisions, Sections and Units in the institution. In addition, it is aimed at harnessing the performance of the institution through the enablement of a “Knowledge Worker environment”. This is also in line with the strategy of the institution. The Parliament of the Republic of South Africa (2009:8) has outlined that, “as Parliament moves towards a knowledge environment with knowledge workers, the institution must ensure that institutional knowledge is cultivated, preserved and accessed by members and staff”.

1.4 Purpose of the study

The study explores the factors that drive or impede the effective use of PCMS in the Legislative and Oversight Division (LOD), as a lot has been invested in the system and it has to be fully utilised.

1.5 Significance of the study

The study contributes towards the understanding of the importance of Knowledge Management in the Parliament of the Republic of South Africa. The study will assist the Legislative and Oversight Division to identify the factors that contribute towards effective or ineffective use of PCMS as a Knowledge Management initiative.

1.6 Research questions

Main question: To what extent is PCMS used in the Legislation and Oversight Division as a Knowledge Management initiative?

In order to address the following research question, the following sub-questions have been identified:

- How is PCMS used as a KM initiative in LOD?
- Is PCMS achieving its intended objectives?
- Which factors facilitate or constrain the usage of PCMS in LOD as a KM initiative?

1.7 Objectives of the study

- To develop an understanding of PCMS as a KM initiative in LOD.
- To find out the contributing factors leading to ineffective use of PCMS.
- To explore the nature of PCMS usage in LOD.
- To determine the level of PCMS training.

1.8 Propositions of the study

Table 1: Proposition of the study

Proposition no:	Proposition
P1	Absence of good KM cultural practices leads to failure of KM initiatives.
P2	Without leadership steering KM initiative processes, KM initiatives are doomed to failure.
P3	Buy-in by employees is critical for KM initiatives to succeed.

1.9 Limitations of the study

The study will be limited as it will focus only on LOD and the findings will therefore reflect the perception of those in the LOD division and not of the whole parliament. Findings will not be generalised to the whole institution.

1.8. Chapter outline

Chapter 1: “Introduction”. The chapter provides the background and rationale for the study, the aim of the study, objectives for undertaking the study and the limitations of the study.

Chapter 2: “Literature review”. This chapter provides an overview of literature on KM and KM models. It also highlights critical factors that contribute toward the success or failure of KM initiatives.

Chapter 3: “Research Methodology”. The chapter outlines the research methodology employed in the study. It discusses the research design, research method, sampling methodology, data collection and the administration of the questionnaire.

Chapter 4: “Analysis of data and research findings”. This chapter presents data, conducts data analysis and presents the findings.

Chapter 5: “Summary of findings and Recommendations”. This chapter presents the summary of findings and recommendations.

CHAPTER 2

In this chapter, the research paper briefly discusses what KM is, what it entails, the KM frameworks and also successful key KM implementation factors in the organization.

LITERATURE REVIEW

2.1 Introduction

In the current economic environment, knowledge is accepted as a competitive asset. It is a tool that can assist an organization to maximise the achievement of its goals (Cong and Pandya, 2003; Kant and Singh, 2008 and Ajmal, 2009). Due to this realisation, corporate spending on KM initiatives has significantly increased (Ajmal, Helo and Kekäle, 2010). Chua and Lam (2005) stipulate that various organizations implement various KM initiatives to identify, share and use their knowledge assets. Wiig (1997) identified the following overall objectives of KM initiatives in an organization:

- To enable an enterprise to act as intelligently as possible in securing its viability and overall success.
- To make sure that an organization realises the best value of its knowledge assets.

Chua and Lam (2005) further indicate that many organizations engage on KM initiatives to improve business processes and to make financial savings. Wiig (1997) asserts that for KM to be systematic in an organization there must be a top-down monitoring and facilitation of knowledge-related activities, creation and maintenance of a knowledge infrastructure; renewal, organization, and transformation of knowledge assets and the use of knowledge assets to realise their value.

To measure the success of KM initiatives, Chua and Lam (2005) state that KM initiatives need to generate greater revenues, enhance user acceptance and

increase competitiveness. Ajmal, Helo and Kekäle (2010) add that for KM initiatives to be viewed successful, there must be resources growth, knowledge content development and usage, project survival and financial return.

Choy (2006:132) asserts that “survey evidences have suggested that, while knowledge has been recognised as source of competitive advantage, it has not been managed well in organizations”. Choy (2006:132) further made reference to a study conducted by Takeuchi (1998), Choi (2000), Chong and Yeow (2005) and Chong (2006) which confirm that organizations are still struggling to implement KM. These research studies have found that there are gaps between perceived KM importance and KM implementation of the critical success factors. Uriarte (2008:100) emphasises that KM development can be full of challenges during the advocacy and learning phases. The challenges include: “introducing knowledge management; identifying the KM team and focal points; learning about the experiences of other organizations; identifying advocates of knowledge management; and promoting wide-ranging support to the KM initiative”. AL-Hakim and Hassan (2012) assert that for an organization to achieve the expected performance through implementation of KM initiatives, they must carefully consider KM critical success factors. Gichoya (2005) and Ansari, Youshanlouei and Mood (2012) see success factors as those factors whose presence encourages success and their lack encourages failure. Table 2 gives a summary of critical success factors for KM initiatives.

Table 2: KM Success factors

KMS Factor Groupings	KMS Critical Success Factor
Strategy-based CSFs (Skyrme & Amidon 1997, Zack, 1999, Damodaran & Olphert 2000, Hackett 2000, McDermott & O'Dell 2001, Holsapple and Joshi 2000, Gold & Malhotra & Segars, 2001, Bhatt 2001, Hasanali 2002, Chua 2004, Chua and Lam 2005, Jennex and Olfman 2006)	Align KM Strategy with Corporate Strategy.
	Possess a comprehensive definition of and communicating KM Objectives.
	Ensure Top Management Commitment.
	Develop New Roles and Responsibilities around KM.
	Design the KMS so that (a) it is easy to use; (b) it is based on Web Technologies (c) it presents accurate and appropriate results; and (d) security concerns are balanced with the need for openness.
	Ensure the planning and implementation addresses the following issues: (a) Ensure a cross-functional approach with IS Function Participation; (b) implement a prototyping approach to development; (c) adopt a pilot strategy for KMS implementation; and (d) possess a high degree of user participation and involvement throughout the project.
Organizational CSFs (Gold et. al. 2001, Bhatt 2001, Hackett 2000, Sambamurthy & Subramani 2005, McDermott & O' Dell 2001, Chua 2004, Chua and Lam 2005, Jennex and Olfman 2006)	Focus on People Factors.
	Develop a team-oriented culture.
	Engender trust among knowledge workers.
	Ensure comprehensive user training.
	Introduce monetary and/or non-monetary incentives and rewards.
	Change organizational structures and processes
Institutional CSFs (Robertson & Scarbrough & Swan 2003)	Address the regulatory, cognitive and mimetic influences from the wider institutional environment.

Source: Tom and Ciaran (2007:614)

The research objective is to explore factors that contribute to the success or failure of KM initiatives within a public organization. In order to understand this it is also appropriate to first unpack what literature states about knowledge, KM and critical success factors of KM.

2.2 What is knowledge?

Alipour, Idris and Karimi (2011:162) assert that “although the word knowledge seems to be obvious and people use this word frequently, the definition of knowledge is not easy”. Haslinda and Sarinah (2009) add that the concept knowledge is viewed differently. Others view knowledge as a thing or object, independent of human action; while other views assert that knowledge does not exist independent of human action. There are numerous definitions proffered by experts, Sarvary (1999), as cited by McGinnis and Huang (2007:627), defines knowledge as “information plus the causal links that helps to make sense of this information”. Knowledge thus means that information is ready to be used and applied in the organizational context using different channels.

Though there are different perspectives in literature on how to define knowledge, the research has adopted Laudon and Laudon’s (2004:7) definition that “knowledge is the concept, experience, and insight that provide a framework for creating, evaluating, and using information”. It builds on information and it is the outcome of processed information.

Sunassee and Sewry (2002) view knowledge as a critical component for competitive and innovative products or services. Zack (1999) adds that organizations view knowledge as a key strategic resource. In order for organizations to be successful, they need to identify which knowledge they will require and then develop strategic tools to harness it with the intention of improving the organization. Sunassee and Sewry (2002) assert that the value of knowledge increases when knowledge is shared in the organization. To increase knowledge sharing in an organization, Cong and Pandya (2003:31) state that organizations need to “construct a knowledge portal, a knowledge platform that can be accessed through various platforms *i.e.* video conferencing *etc*”. Cong and Pandya (2003) also emphasise that to increase knowledge sharing it is critical for organizations to reward those who are willing to share their knowledge and also to apply gained knowledge.

2.2.1 Types of knowledge

Literature provides different types of knowledge, namely tacit and explicit knowledge. Polanyi (1967) and Choo (1998) cited by Karemente, Aduwo, Mugejjera and Lubega (2009:38) introduced “cultural knowledge” as the third type of knowledge which organizations need to manage. This research however, focused on explicit and tacit knowledge that is covered by most literature. Culture has been dealt with as an implementation factor that needs to be considered for the success of KM initiatives.

2.2.1.1 Tacit knowledge

In defining tacit knowledge, Burger (2010:3) states that it is “a cumulative store of the experience, mental maps, insights, expertise, know-how, trade secrets, skills, understanding and learning that an organization has”. Burger (2010:3) went further to indicate that it is included in the organizational culture that had been embedded in the past and present experiences of the organization’s people, processes and values. It is mainly within the brains of individuals or embedded in a particular group within the organization. Cong and Pandya (2003:27) avow that tacit knowledge “generally requires extensive personal contact and trust to share effectively”. It is through prolonged intimate contact between experienced and less experienced people in the organization that this knowledge can be harnessed and shared.

2.2.1.2 Explicit knowledge

Nonaka (1991), Cong and Pandya (2003:27), define explicit knowledge as the knowledge that is “formal and systematic, which can be easily communicated and shared with high degree of accuracy. It can be captured and written down in documents or databases. It includes patents, instruction manuals, written procedures, best practices, lessons learned and research findings”.

Cyert and March (1992) cited by Karemente, Aduwo, Mugejjera and Lubega (2009:37) classify explicit knowledge into the following categories:

- Task performance rule assists organizations to accomplish organizational tasks and facilitate learning transfer.

- Record-keeping rule assists organizations to identify which records to keep and how they should be maintained.
- Information handling rule defines how information should be communicated within the organization.
- Planning rule guides all planning processes and the allocation of resources among the activities of the organization.

Cong and Pandya (2003:27) further indicate that, explicit knowledge “can be categorised as either structured or unstructured. Structured knowledge is the data or information organised in a particular way for future retrieval. This includes documents, databases and spreadsheets etc”. Cong and Pandya (2003:27) add that unstructured knowledge consists of “e-mails, images, training courses, audio and video selections” as the information they have cannot be referenced for retrieval. This research focuses on structured explicit knowledge and how it is managed.

Organizations need to plan well for knowledge to be managed well and for KM initiatives to work before initiating any KM activity, identify which knowledge to keep and also establish ways to communicate that knowledge (Uriarte, 2008).

2.3 Knowledge Management

As stated by Wiig (1997), KM is not a new concept. Knowledge has always been managed implicitly from the time of the first hunters. Hansen, Nohria, and Tierney (1999) assert that for hundreds of years, in the family businesses, commercial knowledge has been passed from generation to generation. Cong and Pandya (2003) add that although KM has been practised for a long time, it was practised informally. Singh and Kant (2008: 141) indicate that “KM effort is no longer an option but a core necessity for organizations anywhere in the country, if they have to compete successfully”. This means that, for organizations in the current economic environment to succeed, it is important to tap into this resource.

Even though KM's importance has been realised and acknowledged by organizations, literature reveals that its implementation was and still is not an easy

process. Wong and Aspinwall (2004:93) assert that “implementing KM remains a challenging task for organizations”. Uriarte (2008:38) adds that “many of the early knowledge management initiatives met with only limited success. As a consequence, questions were asked whether knowledge management was not simply another fad that on paper looked great, but in actual application failed to deliver”. Uriarte (2008:38) further indicates that upon a closer look at KM, organizations realised that failure of KM was not due to KM as a concept but rather in the implementation. Due to this realisation, “a new approach to KM places much more emphasis on people, behaviours and ways of working rather than on the application of technology”.

Different scholars have different definitions for KM and there is no definition that is universally accepted (Uriarte, 2008). Wiig (1997:6) says that “KM is broad, multi-dimensional and covers most aspects of the enterprise’s activities” and it deals with the management of knowledge-related practices and activities. Yao, Kam and Chan (2007:53) adopted the definition of Eppler (1999) and define KM “as a systematic approach with a background in information technology, human resources, strategy, and organizational behaviour that views implicit and explicit knowledge as a key strategic resource and aims at improving the handling of knowledge at the individual, team, organization and inter-organizational level in order to improve innovation, quality, cost-effectiveness and time-to-market”. The above views outlines that KM is an integrated organizational strategy that deals with all organizational issues that will enable the organization to tap in and utilise its knowledge fully. Holsapple and Joshi (1999) argue that organizations need to understand KM before they deal with KM issues and they indicated the following as crucial to understanding KM:

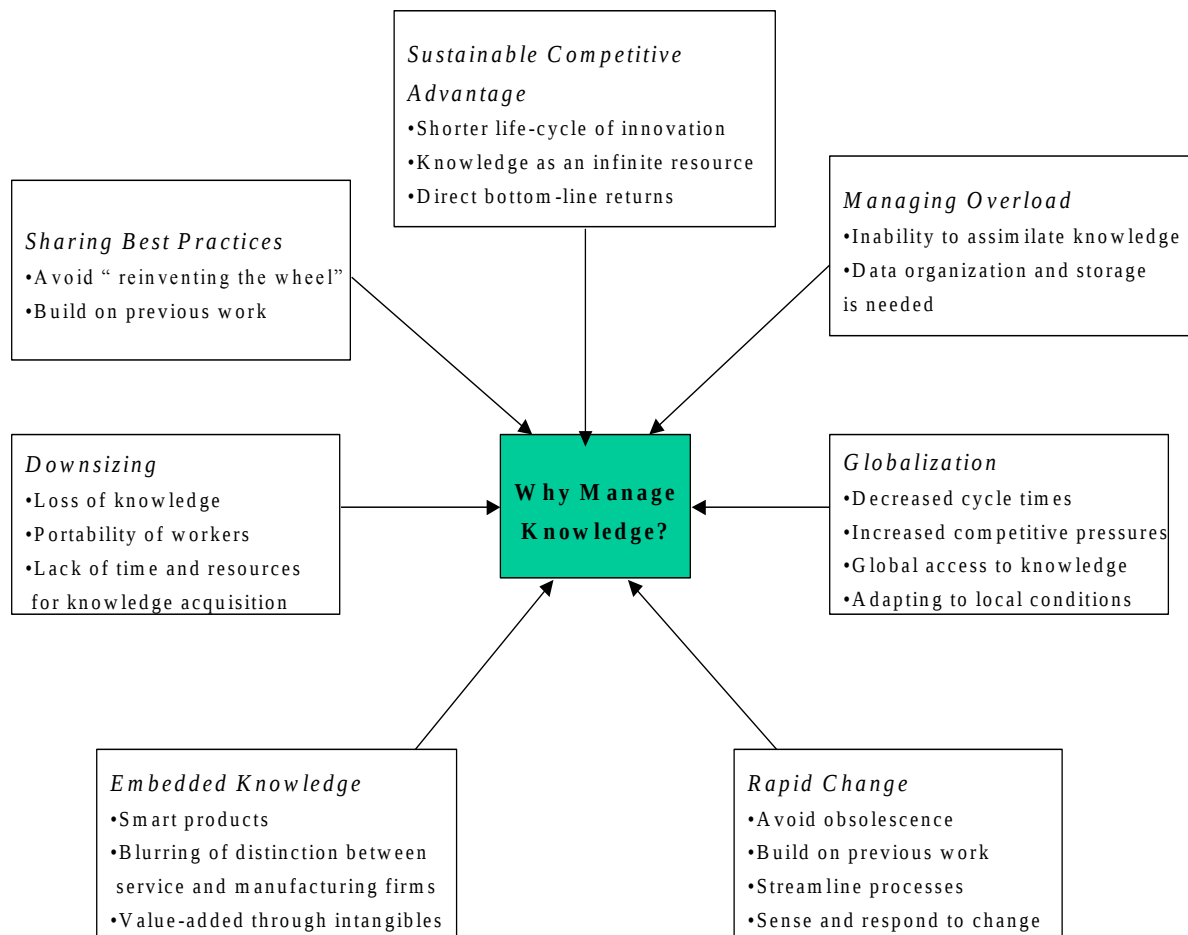
- Identifying the organizational knowledge resources to be managed;
- Categorizing the activities to be done for KM to be functional; and
- Outlining the factors that will have an impact on KM issues within the organization.

Organizations tend not to follow the same approach to KM. Small and Sage (2005/2006) quoted by Esterhuizen, Schutte, and Du Toit, (2012:4) identified two approaches to KM. One approach focuses on “knowledge resources to facilitate access and the re-use of existing explicit knowledge by using almost only information

technology tools”. While the other approach focuses on using KM as a “multidisciplinary subject that focuses on the context and environment for knowledge acquisition, representation, transformation, sharing and use, using behavioural as well as technology management”. PCMS is a technological tool designed to enhance knowledge sharing and retention within the organization.

Wiig (1997) further indicates that KM differentiates between individuals, corporations and countries. The idea is further supported by Kinney (1998) as cited by Karemente, Aduwo, Mugejjera and Lubega (2009) who asserts that KM helps organizations to create, capture, acquire and use knowledge to improve organizational performance. Karemente, Aduwo, Mugejjera and Lubega (2009:39) affirm that KM is the process whereby “organizations generate value from their intellectual and knowledge-based assets”. It is therefore clear that KM is a conscious organizational effort to integrate strategies and practices to enhance individual performance and to enable the organization to deliver better services and goods.

Figure 2: Reasons for KM



Reasons for Managing Knowledge. ©IBM Global Services

Copyright 2010 John Wiley & Sons, Inc.

Figure 2 illustrates the critical importance for both public and private organizations to take the issue of KM seriously. It clearly outlines that good KM practises helps organizations to sustain their competitive advantage by having strategies in place that will enable them to produce much more with less, and also to sustain the demand for their products and services in the market.

Both explicit and tacit knowledge are essential within an organization and if managed well, they give an organization a competitive advantage. Davenport (1996) indicates that many KM practitioners view KM as a costly, political and ceaseless process which corporations cannot do without. Davenport (1996) further points out that it is more costly for organizations to “forget what key employees know, not to answer customer questions quickly or at all, or to make poor decisions based on faulty knowledge”. In this competitive environment, an organization cannot afford to not make use of KM principles as the stake of not using it is too high. Chawla and Joshi (2010:813) point out that if knowledge is managed well, then it gives the organization an opportunity “to secure its viability and overall success and realize the best value of its knowledge assets”. Yu-Yuan Hung, Ya-Hui Lien and McLean (2009:320) see KM as a tool that “helps in integrating organizational resources, aligning organizational business processes, rebuilding organizational learning culture, and strengthening organizational social capital”. If organizations want to succeed and have a competitive advantage, they must use this organizational resource. Much in the same vein, Grant (1996) and Prusak (2001) and Ahmed, Lim and Low (2002) as quoted by Daud and Yusuf (2008:169) view “KM as a base of an organization’s competitiveness in the global economy”. Chawla and Joshi (2010:811) assert that “KM builds on the existing management practices, integrating them into a philosophy for improving performance”. It is when organizations are able to manage knowledge that they become smarter than their competitors. Good KM practices help organizations to provide quality service and products in a lean, cheaper and better way.

McGinnis and Huang (2007:628) contend that “created knowledge must be transferred to a shared space for the purpose of storage and usage”. PCMS in Parliament offers this space. Sveiby (1997) as cited by Daud and Yusuf (2010:138), assert that KM processes “can help an organization to use acquired knowledge for tasks such as problem-solving, dynamic learning, strategic planning and decision-making”. The above quotations reinforce the view that when created knowledge is being fully utilised, it helps to improve the individual’s job performance as well as the organization’s performance - as workers and managers make informed decisions to improve the organization.

2.4 KM in public sector

In the research conducted by Yuen (2007) regarding the use of KM by developing countries, in which South Africa was a participant, 69% of the countries were considering the need of such programmes, 22% were in the process of implementing it and 9% had the programmes in place. Even though there is still some reluctance in the deployment of KM, all the countries sampled were aware of KM initiatives and their benefits. In comparing the private sector to the public sector, Yao, Kam, & Chan (2007:52) assert that the private sector is far ahead of the public sector in implementing KM even though both sectors are aware of the “benefits of KM in improving efficiency and effectiveness”. They further indicated that the cause could be the uncompetitive nature of the public sector. Ahn, Park and Jung (2009) add that though the private and the public sectors environments are different in relation to KM deployment, the KM deployment strategy and concepts are the same. Ahn, Park and Jung (2009:389) further indicate that the environments differ because KM in the private sector is profit driven whilst in the public sector it helps “to decrease bureaucratic barriers by articulating information like new policies that are developed from the top level to the lower levels of the system”. Wiig (2002) adds that KM in the public sector can enhance the decision-making ability, help the public to participate in policy-making and develop a KM workforce which allows society to prosper and to increase the citizens’ quality of life.

Cong and Pandya (2003:27) identified the following benefits of KM for the public sector:

- It improves the organizational performance by ensuring better quality, productivity, efficiency and innovations.
- It gives employees an opportunity to improve their skills, experience and performance by working as a team.
- It increases value in the way resources are being spent.
- Knowledge sharing becomes a strategic tool to increase the competitive advantage.

The Batho Pele White Paper (1997:11) emphasises “Value for money”. It calls on the government to do more with less when conducting its business. KM as a strategic tool offers that.

The Department of Public Service and Administration (2010:6) outlines the importance of KM in the public institutions. It clearly reveals that if KM is executed properly it will help the public sector to:

- Achieve effective and quality service delivery to the communities.
- Improve policy formulation and implementation.
- Effectively deal with unexpected challenges and disasters.
- Create partnerships across all departments to create synergy in the delivery of services across all departments.
- Strengthen relationships between all spheres of government.
- Promote transparency by enhancing knowledge sharing between the public sector, customers and partners where it pertains to the needs of customers and partners.
- Avoid repetition and provide a learning opportunity for departments.
- Maximize both organizational and individual performance

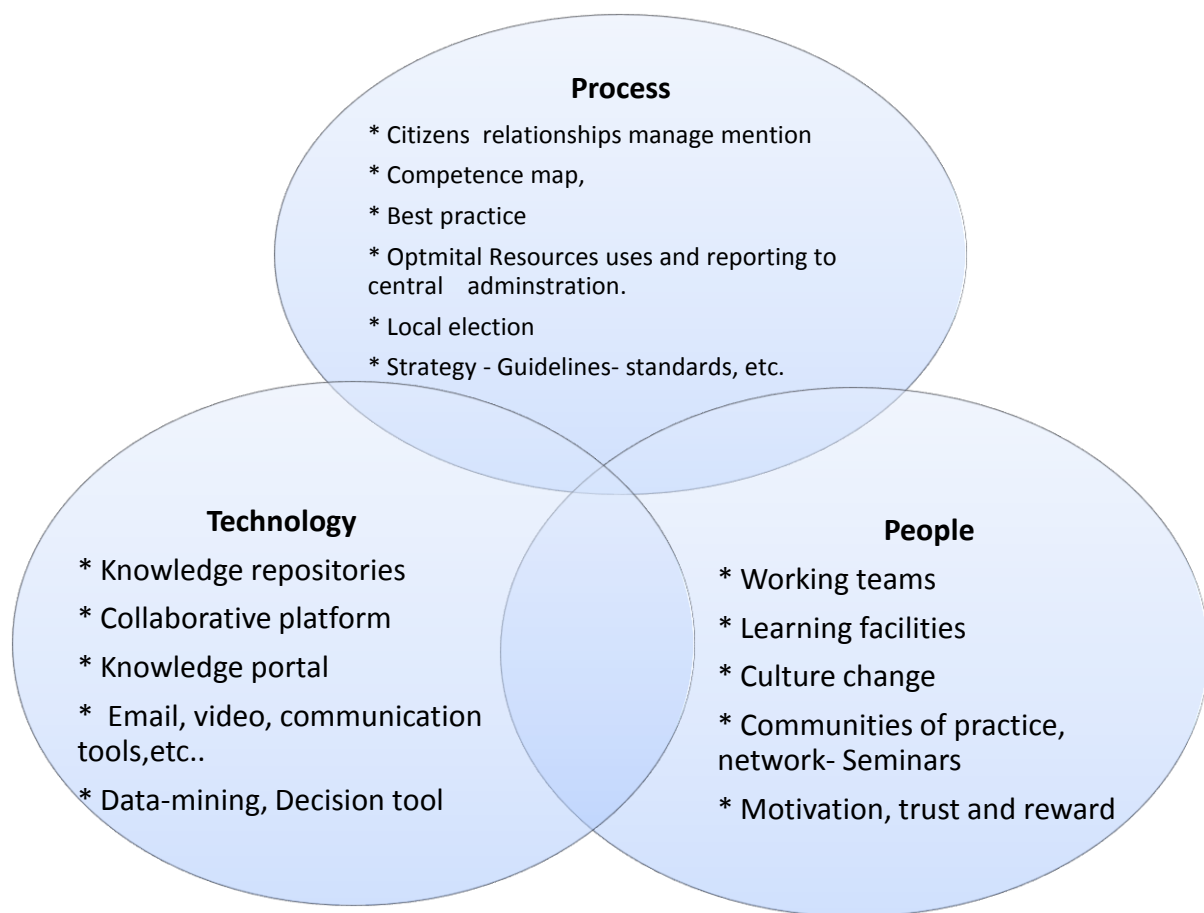
It is vital that organizations consider the KM elements if they wish to achieve the above benefits and have a successful KM implementation process.

2.5 Elements to be considered for KM in an organization

People, processes and technology are the three key elements of the KM system (Edwards, 2011). CIO Council (2001:1) states that “KM focuses on people and organizational culture to stimulate and nurture the sharing and use of knowledge; on processes or methods to locate, create, capture and share knowledge; and on technology to store and make knowledge accessible and to allow people to work together without being together”. Saade, Nebebe, and Mak (2011) add that although management of knowledge is highly dependent on information technology, the creation and usage is people centred. The integration of these components is essential for the success of KM implementation. Shannak, Masa'deh and Akour (2012:152) further point out that there is a consensus amongst KM scholars that

“technology is 10% of the effort required, the process is 20% while the remaining 70% is people/cultural issues”. Davenport and Prusak (2000), Collison and Parcell (2002) and David Skyrme Associates (2003) as cited by Gillingham and Roberts (2006) show that for the success of KM, time and money should be equally distributed to people, process and technology.

Figure 3: KM Elements



Processes, technology and people components interaction adapted to the public sector source Arntzen Bechina (2007)

2.5.1. People

Dove (1999) postulates that new knowledge has no value, unless it is applied in order to create changes within the environment it is applied to. Even if an organization has knowledge, without people applying it in the organizational context that knowledge is useless. Groenewald (2003:8) asserts that “people are at the heart of KM, the success of KM depends on an organization’s ability to manage its employees”. People use knowledge to assist them to be efficient. Lok (2008) avows that the success of any KM project relies on how people have accepted the project. It

is critical that employees are involved in the KM implementation processes from the start, as it helps them to own the process.

2.5.2. Technology

Gillingham and Roberts (2006) reflect that technology is a hard aspect of knowledge responsible for capturing, storage and distribution of knowledge for people to use. Though technology is a great enabler of KM, its value is added by people. Al-Hawamdeh (2002) indicates that though technology is very useful, it cannot capture the richness of knowledge and complexity in its content. People are responsible for capturing it by making use of technology. Chong (2006) adds that technology is not that useful in KM without a proper KM system in place.

2.5.3. Processes

Lok (2008) regards people, process and technology as mutually dependent pillars that ensure the success of KM projects. According to Lok (2008:9), process is “the glue that ensures that the organization’s process is strongly embedded within the people and technology pillars”. It is imperative that when organizations are considering KM initiatives that they should also bring people on board, as the understanding and use of this technology by people within the organization is also central. If they are not brought on board, the systems might remain white elephants. Du Plessis (2007:91) argues that for KM to be effective in an organization, KM processes need to “align with business strategies to improve enterprises’ capability, tempo and effectiveness to deliver products or services through the planned and structured management of the creation, sharing, harvesting and leveraging of knowledge as an organizational asset”. The above view clearly indicates that KM processes must be intact to enhance the organization’s ability to achieve its intended goals through KM practices.

Pawlowski and Bick (2012) identify three levels of KM processes that are critical for the deployment of KM in an organization, namely knowledge processes, business processes and external processes. Business processes deal with the core processes

of an organization. It includes the following - human resource development, customers service, software development and deployment of software businesses. Probst, Raub and Romhardt (1999) as cited by Pawlowski and Bick (2012:98) indicate that knowledge processes support the core business process to facilitate KM inside and outside the organization. They further indicate that knowledge processes assist in “knowledge identification, knowledge acquisition, knowledge development, knowledge sharing or knowledge preservation, and knowledge use”. The last process is an external process which incorporates stakeholders’ engagement and participation in the business process.

2.6 Knowledge Management Framework

Storey and Barnett (2000) indicate that a number of KM initiatives in organizations will fail irrespective of how well they are resourced. Maier and Remus (2003) point out that failure is due to the absence of a procedure and methods to guide KM practitioners on what to do in order to implement KM strategies. Wong and Aspinwall (2004) assert that for KM initiatives to succeed, organizations must develop an implementation framework before effecting actual implementation. They went further to indicate that in the pursuit of constructing an implementation plan, organizations should carefully select the apposite elements that should be incorporated in the framework for the implementation process to run smoothly. It is clear that if organizations want KM initiatives to succeed they need to carefully study organizational needs, know how to implement KM initiatives, where to start implementing and also to have a cohesive KM implementation framework.

Frameworks provide a structure to understand real problems. They are designed in an attempt to address speculative challenges. In defining a framework, Popper (1994) as cited by Wong and Aspinwall (2004:94) indicates that a framework is “a set of basic assumptions or fundamental principles of intellectual origin that forms the underlying basis for action. It provides a theoretical basis for performing the relevant actions and activities”. This is also supported by Walker, Maqsood, Grisham and Srinivasan (2006:1) who assert that “frameworks and models can provide a way of trying to tie together disparate initiatives and to also provide overarching strategies”.

On the same point, Pawlowski and Bick (2012) avow that frameworks outline all that is needed and why it is needed for both design and implementation of KM processes. They help to measure the background aspects, impelling factors and results. Karemente, Aduwo, Mugejjera and Lubega (2009:35) reflect that in various organizations KM frameworks are used as a “model that initiates and strengthens knowledge management activities in the context of achieving organizational excellence”. This means that KM frameworks work as maps that direct organizations to execute various actions that suit their organizational KM needs.

Holsapple and Joshi (2002) assert that for decades KM scholars developed various frameworks and theories to explain why it is important to have KM within an organization, how it can be implemented successfully and the factors that contribute to its success. Holsapple and Joshi (2002:50) further identify various reasons for organizations to have a KM implementation framework before they start implementing KM initiatives as:

- It provides awareness and understanding of KM principles, elements and processes;
- It helps in the scoping of KM projects and initiatives;
- It facilitates the communication of KM processes, as well as vision and implementation issues within the organization;
- It also helps to assess whether all implementation issues have been covered and how they have been covered;
- It facilitates the management and coordination of the implementation process.

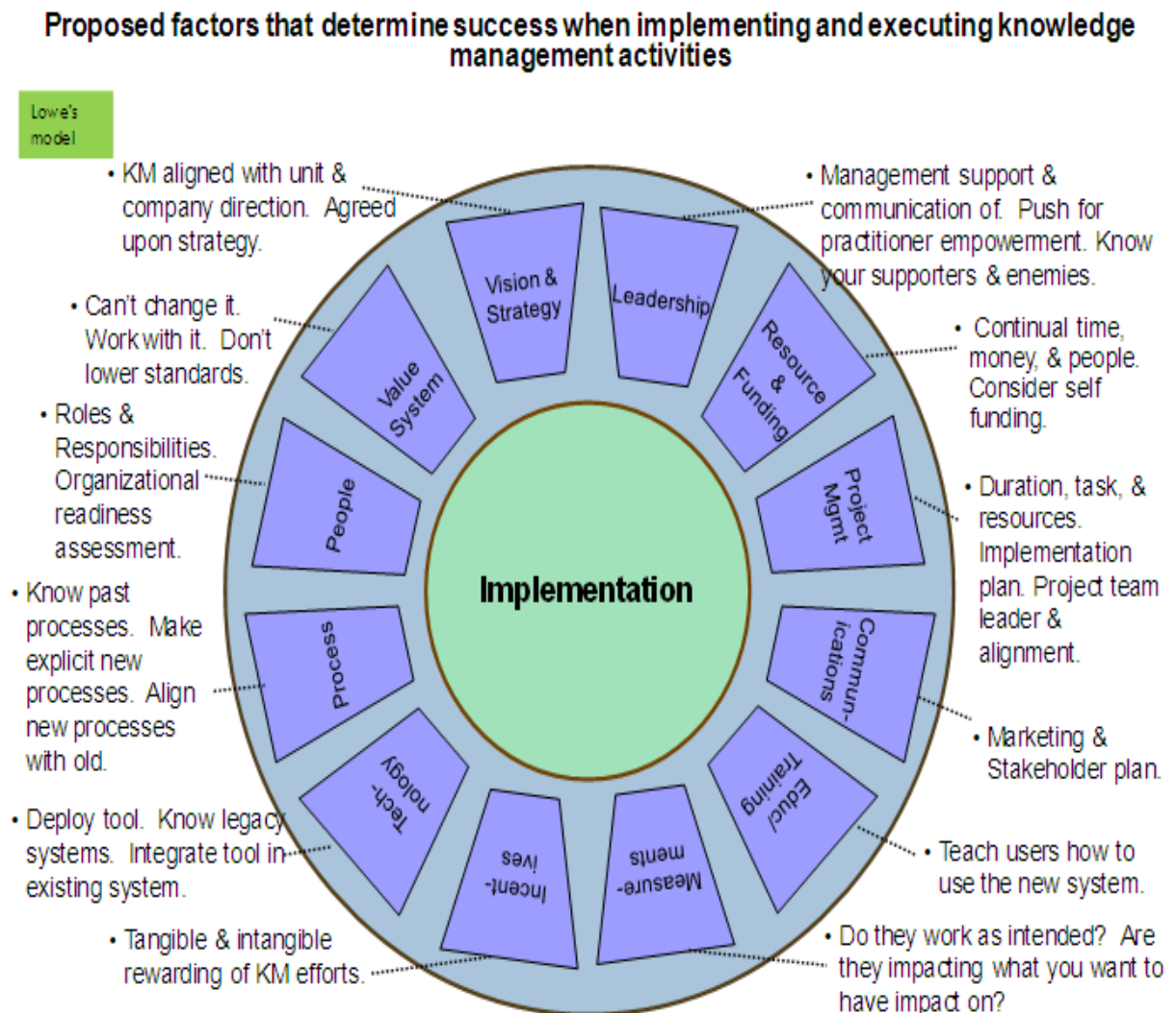
Karemente, Aduwo, Mugejjera and Lubega (2009) assert that not all KM frameworks fully address KM activities within the whole organization. Some KM frameworks respond to certain KM elements. Wong and Aspinwall (2004) highlighted different kinds of frameworks; the knowledge creation framework developed by Nonaka (1991, 1994) and Nonaka and Takeuchi (1995); frameworks that outline KM processes; those that focus on KM performance in organizations and those that assist organizations to have a reference in structuring, analysing and evaluating KM initiatives in the implementation processes. The last types are those that focus on the direction that organizations should take when implementing KM initiatives. This

research will focus on the KM implementation frameworks, with special reference to Lowe's model.

2.6.1 LOWE'S CASUAL MODEL

Lowe's casual model has been chosen for this research as it best suits the objectives of the research. The model outlines critical elements that an organization should consider if it wants to implement KM successfully. Below are the proposed critical factors for the successful KM implementation as proposed by Lowe. The research is trying to ascertain whether the success or failure of the Parliament of the Republic of South Africa to adhere to some of these factors is causing the ineffective or effective use of PCMS at parliament.

Figure 4: Lowe's KM implementation model



Source: http://www.providersedge.com/docs/presentations/KM_Offerings_and_Lessons_Learnt_During_Their_Implementation.pdf

2.7 Key success factors for KM Initiatives proposed by Lowe

Ansari, Youshanlouei, Mood (2012:213) assert that “KM is not a one day activity; it needs a harmonic plan composed of a limited set of regions (critical factors) to result a successful performance”. Chong (2006) maintain that since the 1990s, several researchers have tried to come up with a comprehensive list of critical success factors for KM implementation but the list is not the same due to the multidisciplinary nature of KM. Gichoya (2005) and Borousan, Hajiabolhasan and Hojabri (2012) point out that the lack of these critical success factors becomes a barrier and it leads to failure of KM initiatives. They went further by indicating that it is important for organizations to study these factors so that they are able to identify factors that will be barriers and deal with them beforehand. Storey and Barnet (2000) as cited by Wong and Aspinwall (2004:93) state that for KM initiatives to work in organizations, factors like the support of a technological infrastructure, a change in organizational culture and the management of different types of knowledge are critical. Skyrme and Amidon (1997) identify the following factors as being key to successful KM implementation - namely robust commitment to the business, architecture and vision, leadership, culture, continuous learning, technological infrastructure and organizational knowledge processes. Borousan, Hajiabolhasani and Hojabri (2012:9590) state that all factors need to be considered by organizations that are going to be true knowledge-based enterprises, but small scale projects must consider only a few of them. Lowe’s model has outlined different factors that organizations need to focus on, however the research focused on strategy, leadership, culture, technology and people, as many researchers agree that they are fundamental for KM implementation of any scale.

2.7.1 Leadership

There is consensus amongst many researchers that top management’s full commitment is the most crucial driving force for KM implementation (Chong and Choi, 2005). It is critical to understand what a leader is before defining leadership. Kotter (2001) sees leaders as strategist responsible for creating visions and strategies. In an organization, leaders are vision bearers. A leader needs to develop

a strategy to guide the organization towards achieving strategic objectives for the vision to become a reality.

Deloitte (2011:2) assert that “Leadership is not a role, specific personal capability or skill”. Kotter (2001) view leadership as the ability to cope with change; it sets the direction for change; it involves the search for patterns and relationship, and it does not produce detailed plans but it sets the direction for the crafting of a vision and strategies to realise the plans. Brevis, Vrba and de Klerk (1997: 279) view leadership as an “activity that infuses energy to activate its members and resources to get things moving and to keep them in motion”. This is crucial because leadership is responsible for the development of business and operational strategies. Chong, Chong and Wong (2007:454) assert that these strategies help to align KM with business tactics and thus drive the value of KM throughout an enterprise. Leadership also focuses on establishing a knowledge infrastructure and support system that enhances and facilitates the sharing and application of knowledge at the appropriate levels. Choi (2000:44) identifies poor quality leadership as “a threat to successful implementation of KM”. Wong (2005) asserts that leaders have to lead and be an example by displaying acceptable KM behaviours, namely knowledge searching and sharing. Wong (2005:267) further indicates that when leaders are role models for good KM practices, they “influence other employees to imitate them and increase the propensity of employees to participate in KM”.

Martensson, 2000; Manasco, 1996; Truch, 2001; Jarrar, 2002; Sharp, 2003; Davenport et al., (1998) as cited by Wong (2005) emphasise the importance of the support and commitment of senior managers as critical to the success of KM initiatives. Storey and Barnett (2000) further indicate that the support by senior management should be continuous for KM initiatives to succeed. Riege (2005) avows that managers are faced with a challenge to create an environment in which people will want to share their knowledge and also make use of other people’s knowledge. Hansen, Nohria and Tierney (1999:116) add that “only strong leadership can provide the direction a company needs to choose, implement and overcome resistance to a new knowledge management strategy”. The above views clearly outline that without strong leadership steering the whole process of KM initiatives in

an organization, KM initiatives are doomed to fail. Without visionary leadership, KM initiatives are like a ship without a captain. The cargo will never reach its destination because the leadership need to guide all KM processes, to ensure that KM initiatives enhance the realisation of the KM strategy and the overall business strategy.

It is critical to the success of KM that the position of a Chief Knowledge Officer or KM manager is filled when the organization engages in KM issues. It is the duty of the KM manager to ensure that systems and strategies are in place and resources are fully utilised to enhance knowledge sharing.

- **Chief Knowledge Officer**

Kok (2004) maintains that “KM requires a knowledge champion with the vision to motivate people to engage in knowledge-sharing practices within organizations. The Chief Knowledge Officer's role is to act as a knowledge leader and ensure that the structures, networks and culture that make KM possible are implemented and fostered”. Asoh, Belardo and Neilson (2002:4) indicate that although there is confusion in some of the Chief Knowledge Officer's duties with that of the Chief Information Officer, “the underlying fact is that new titles/positions are being created to make the best of the organization’s knowledge capital” and the role of Chief Knowledge Officer is to ensure that full knowledge sharing occurs.

- **Benchmarking**

Camp (1989) as cited by Chong and Choi (2005) describes benchmarking “as the systematic or on-going process of searching for industry-wide best practices that lead to superior performance”. Chong and Choi (2005) add that benchmarking help organizations to determine how the leading organization achieves these performance levels. It rests upon the leadership of the organization, to identify organizations whose best practises on KM they need to learn from. The Parliament of Finland has led the way in implementing KM.

2.7.2 Strategy

McKinsey (2002) defines strategy as “the route that the organization has chosen for its future growth; a plan that an organization formulates to gain a sustainable competitive advantage”. Du Plessis, Jooste and Strydom (2005:4) define strategy as “the process or plan of action necessary to achieve the objectives”. They indicated its origin as being “derived from the Greek word *strategos* meaning a leader of an army”. This reflects the seriousness of the role that a leader has to play for the strategic objectives to be fulfilled, as in the army you do it right and be safe or you mess it up and your territory is invaded. Porter (1996:18) sees strategy as “the creation of a unique and valuable position, involving a different set of activities”. Porter (1980) further purports that strategy is multidimensional, situational and varies by industry. This reflects that the overall strategic intent and KM strategy of a profit-making organization would differ from that of bureaucratic agencies such as governments; in the business sector, profit-making is the driving factor while in bureaucratic agencies the driving force is the quality of service delivery.

Rumizen (2002) asserts that many people use the term KM, ignoring the organizational behaviour and the link between KM strategy and the business strategy. Hackett 2000, McDermott & O'Dell 2001 as cited by Tom and Ciaran (2007:614) state that KM strategy implementation is not a technical issue but that “technical and social processes interact into influencing the success of knowledge management initiatives”. Cong and Phandya (2003:25) argue that “strategies and plans for implementing KM strategy must be carefully thought-out in advance in order to succeed in the attempt and effort”. The idea is further supported by Davenport & Prusak (1998) and Hackett (2000) as cited by Tom and Ciaran (2007:614) who indicate that KM implementation is a challenge within organizations “as it requires the application of significant organizational resources, techniques and tools which require solid planning from the beginning”. They further indicate that KM strategy should clearly outline all KM project implementation specifications for the KM project to succeed. The success of any project can never be guaranteed without careful planning, and so too with KM projects.

Du Plessis (2007) states that the KM strategy must clearly outline the value added by engaging in knowledge management programmes and also indicate the risks associated with such programmes. Du Plessis (2007) and Sunassee and Sewry (2003) emphasised that KM must align with business strategies. The above views clearly indicate that for organizations to realise their visions and implement KM successfully, they need to develop an outstanding KM strategy which can be easily implemented for organizations to be prominent.

Sunassee and Sewry (2003:25) see KM strategy “as a high-level plan that aims at supplying the organization with the knowledge resources that it needs to carry out its vision and goals”. In support of the above statement, Hubert Saint-Onge as cited by Chatzkel (2000) in Sunassee and Sewry (2003:25) indicates that KM strategy “provides the framework within which his organization manages new initiatives aimed at leveraging the intangible assets of the organization”. He went further to indicate that “strategy outlines the processes, the tools and the infrastructure required for knowledge to flow effectively”. Skyrme (1995) argues that KM strategy has to outline how knowledge can be used in an organization to adapt or anticipate environmental changes. It should also provide for the important areas of knowledge and its processes. Shannak, Masa'deh and Akour (2012:152) add that KM strategy should also address all change management programmes, like “awareness campaigns, understanding skills required to maximize knowledge, developing a rewards scheme and developing measuring requirements”. It is clear that the KM strategy is core for KM implementation, as it informs the organization which resources are needed and how they should be distributed to effectively perform the KM function.

2.7.3 Culture/ Value Systems

Wong (2005:267) states that “organizational culture defines the core beliefs, values, norms and social customs that govern the way individuals act and behave in an organization”. Schermerhorn et al. (1991) as cited by Chong and Choi (2005) further indicate that the set of beliefs include organizational purpose, criteria of performance, the location of authority, legitimate base of power, decision-making orientation, leadership style, compliance, evaluation and motivation. Cooks (2001) as

cited by Chong, Chong, and Wong (2007) assert that these beliefs provide an identity for the organization.

Organizational culture and organizational performance are intertwined. Khan, Usoro, and Majewski (2010) and Al-Adaileh and Al-Atawi (2011) avow that there is consensus amongst researchers that organizational culture plays a critical role in an organization's performance and efficiency. Leidner, Alavi, and Kayworth (2006:17-18) as cited Watson (1998) claim that a study by Ernst and Young stated that culture impedes knowledge transfer by "citing the inability to change people's behaviours as the biggest hindrance to managing knowledge". This is further supported by Wilderom et al. (2004) as cited by Khan, Usoro, and Majewski (2010:55) who indicate that organizational culture is the glue that holds the organization together and motivates "employees not only to perform well but also to feel committed to the organization". Ansari, Youshanlouei and Mood (2012) affirm that end-users need to have a positive thought and sound culture for the acceptance of the system. The above views indicate that for an organization to keep productivity up and achieve its objectives, the organizational culture must be intact and conducive to perform to the maximum level. Park, Ribiere, & Schulte (2004) argue that changing culture takes effort and time. Asoh, Belardo and Neilson (2002:9) assert that "if an organization is unable to handle cultural issues properly, it should probably stay with information management rather than attempting KM".

2.7.4 People

Ansari, Youshanlouei and Mood (2012) argue that employees are fundamental to the organization's success as they build the organization. Smith (2004) argues that the leading factors of sub-standard KM performance are the lack of supportive attitudes and emotions by the organization's employees, and for years these factors remained unacknowledged but currently organizations are acknowledging these as critical factors that affect KM implementation. Hansen, Nohria and Tierney (1999) argue that more investment has to be made in recruiting highly qualified human resources and rewarding them for sharing their knowledge, and that moderate investment has to be made on IT as its role is only to connect people. The above views reflect that when the human resource is well-managed, KM implementation can be fully realised.

Literature has revealed that human resources can be managed in the following manner to ensure the success of KM initiatives:

- ***Training***

Wiig (1999) avows that one of the benefits of adopting KM in an organization is to enhance employee capability and organizational learning. Aiming at organizations to realise that training is fundamental - Ansari, Youshanlouei and Mood (2012:215) assert that “end-users of system and technology must have proper skills and sufficiency and task expertise”. Wong (2005) states that training is vital for the success of KM because it helps organization members to understand KM better. Chong (2006:134) adds that training “creates effective work behaviours to support KM principles”. Wong (2005) further emphasises that for the success of KM it is vital that the organizations equip organization members with the skills which will foster creativity, innovation, and knowledge sharing. Chong and Choi (2005) stresses that the real advantages of KM implementation cannot be realised if employees are not empowered; without the appropriate knowledge and skills, it is impossible for employees to perform their jobs effectively. When employees are empowered, they possess enough skills and knowledge to drive the KM processes in an organization.

- ***Employees' involvement***

Pryor, Taneja, Humphreys, Anderson and Singleton (2008) indicate that people will respond differently to change in an organization. Some of the people will be excited about it while others will resist it. Change can make people feel insecure and uncertain of the future. Holsapple and Joshi (2000) reflect that leadership should be the catalyst of all change-effort by communicating the importance of KM, motivating and creating a culture that promotes knowledge sharing and creation in an organization. Wigg (1999) asserts that KM requires effective and active communication that will enable employees to understand and accept the value of KM for the stakeholders, the enterprise and also for them as the employees. Wigg further indicates that for KM to succeed it is imperative to clearly communicate the role and responsibilities of the individual, and also the importance of their contribution to the

success of KM. The statements above emphasise that when employees are involved in an organization's change process, they support it and also take ownership of the process.

- **Motivation**

The motivation of employees to share knowledge is vital for the success of KM initiatives. Hansen, Nohria, and Tierney (1999) assert that for people to share knowledge they need incentives. Al-Hakim and Hassan (2012:34) affirm that “the successful KM implementation hinges on the motivation of employees to create, share and apply knowledge”. Sing and Kant (2008) reveal that the lack of a motivation and reward system in an organization is a barrier for KM because it discourages people to create, share and use knowledge; it also leads to the failure of achieving the organizational goals. Riege (2005) indicates that managers need to motivate and reassure employees, and that they should not be anxious about sharing their knowledge in the fear of the intellectual property being stolen. Hansen, Nohria, and Tierney (1999) indicate that for people to share knowledge, the incentives must be real and not an enticement; employees' contribution should be part of their performance reviews. Yao, Kam and Chan (2007) add that the lack of incentives/rewards is one of the strongest barriers to knowledge sharing.

Ajmal, Helo and Kekäle (2010:162) identify three groups of incentives, namely:

1. Remuneration – material rewards (especially money) for acting in a particular way;
2. Moral – adopting a particular choice because it is considered to be the “right” (or admirable) thing to do, or because a failure to act in a certain way is likely to be condemned as improper; and
3. Coercive – adopting a particular course of action because a failure to act in this way will result in adverse consequences (or “punishment”).

- **Team work**

Lin, Wu and Yen (2012) assert that knowledge flow within an organization is invisible but that it works with any cooperative team. According to Cohen & Bailey (1997) as

cited by Chong and Choi (2005), “Teams are groups of two or more people who interact and influence each other, are mutually accountable for achieving common objectives and perceive themselves as a social entity within an organization”. Kok (2004) indicates that KM is a collaborative effort in which everyone in the knowledge-based organization should play a part. Kok further indicates that KM’s success and value is highly dependent on the active participation of all professionals in an organization.

2.7.5 Technology

De Tienne, Gibb, Hoopes and Harries (2004:1) indicate that since its invention, technology was seen as the “fix-all solution” to KM issues and that investment in more of these technologies was called for but it did not offer what was expected. Cooks (2001) as cited by Chong, Chong and Wong (2007:455) assert that technology refers to “the infrastructure of tools, systems, platforms and automated solutions that centralise and enhance the development, application and distribution of organizational knowledge”. Chong, Holden, Wilhelmij, and Schmidt (2000:369) view “KM as a process of leveraging and articulating skills and expertise of employees, supported by information technology”. Chong, Chong and Wong (2007:455) add that “the goal of technology is to take knowledge that exists in people’s minds and make it widely available throughout an organization. It provides the foundation for solutions that automate and centralise the development, application, deployment and sharing of knowledge”. Technology can assist a well-planned KM initiative where all processes have been taken into consideration. A number of content management software are used by organizations to assist them towards the achievement of KM. Content management will be discussed in detail below.

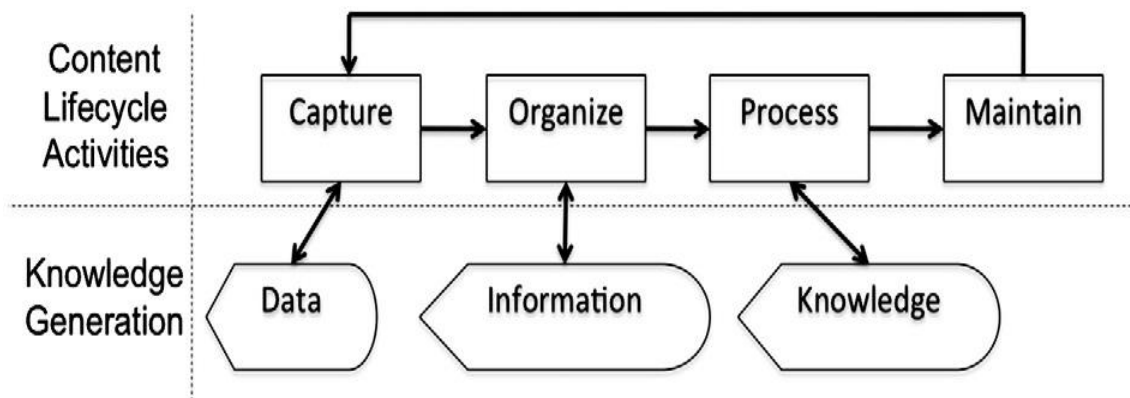
2.8 Enterprise Content Management (ECM)

Prior to defining an enterprise contentment management system, it is important to understand what content management and a content management system is. Hackos (2002) sees content management as an ongoing process performed to continually improve the way content is managed in the institution. Hackos further indicates that content management encourages users to categorise and organise information so that it can be retrieved and developed further. Globalscape (2006:3) views content management as “the system and processes whereby information is created, managed, published and archived”. Globalscape further indicates that in an organization there are various cycles that information passes through; the content management system provides the infrastructure that is needed for people to contribute effectively to the content. White (2005: xv) defines the content management system as “a software system that defines the way in which content is managed within the overall content management life-cycle, from creation to publication”. Both authors are in agreement that content management is a process that provides for the organizational content to be well-managed, while the content management system is the software systems that assist organizations to effectively manage their content.

Enterprise content management on the other hand is defined by Bell, Shegda, Gilbert and Chin (2010:1) as a “strategy to deal with all types of enterprise content and a set of software products for managing the entire life-cycle of that content. Xue and Yahya (2012:101) stipulate that ECM is of critical importance to the success of the organizations as it does not only involve “technical but also strategic aspects of management of enterprise contents over their life-cycle”. Alalwan (2013) indicates that organizations implement ECM to help them deal with information overload and their structured and unstructured data, and also to give organizations easy access to its information. Alalwan (2013:11) further indicates that ECM influences organizational performance and also improves “managerial decision-making”. Bell, Shegda, Gilbert and Chin (2011:6) assert that ECM can help organizations to “take control of their content, be effective when conducting their business, encourage teamwork and also make it easy to share information”. Katuu (2011:39) defines ECM

as “an ecosystem that facilitates change”. This signifies that when an organization is implementing ECM strategies, change must be visible in the way it handles its information. Data and information must be well-structured and easily accessible to facilitate knowledge sharing. Figure 5 below outlines the flow of content and how knowledge is generated in the ECM system.

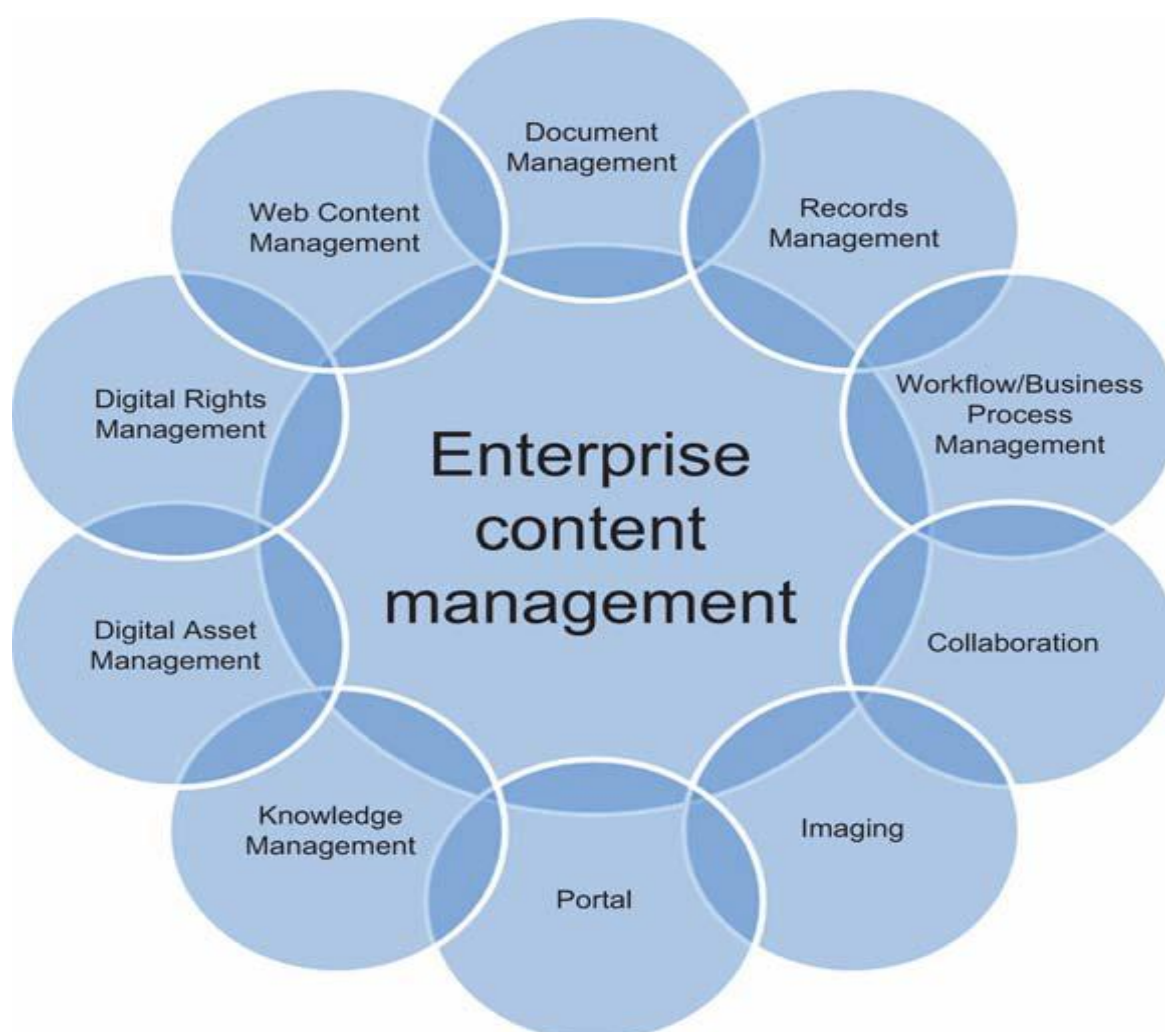
Figure 5 ECM activities and knowledge generation



Adapted from Alalwan (2013:11)

Katuu (2011: 40) points out that when ECM strategies are being implemented in the organization, they manifest themselves in the following components: “Document Management, Records Management, Workflow or Business Process Management, Collaboration, Portal, Knowledge Management, Imaging, Digital Asset Management, Digital Rights Management, and Web Content Management”.

Figure 6 : The modules of typical ECM application



Adapted from Katuu (2011:40)

2.9 PCMS as an Enterprise Content Management System

The Parliament of the Republic of South Africa (2006:9) states that the Hummingbird Enterprise Suite will provide Parliament with an integrated platform for PCMS - with solutions where business information such as documents, records, virtual deal room exchanges, discussions, email or financial data will be managed and “the solution is designed as modular applications that are fully interoperable with each other, enabling Parliament to incrementally build an enterprise content management solution to meet the evolving information needs in a cost-effective manner”.

The Parliament of the Republic of South Africa (2006:10) further outlines that the “Hummingbird enterprise content management (ECM) solutions provide an integrated platform for managing enterprise content within its entire life-cycle” and it also manages the structured and unstructured content of the organization. The Parliament of the Republic of South Africa (2006:9) adds that PCMS was introduced to attain the following objectives:

- A single information storage solution that will provide an integrated approach to managing information at Parliament, including documents and records, thus improving access to information.
- Introduce a computer-based file plan.
- Improve Parliament’s ability to track the location of documents and records, to eliminate lost or misplaced documents and to eliminate the time wasted in trying to locate these documents.
- Provide instant access to relevant and useful information by users.
- Improve Parliament’s ability to exchange and share information and knowledge, to break down the boundaries across divisions, sections and geographical location.
- Streamlining and optimization of the core business processes of Legislation and Oversight.
- Improve the turn-around time of Parliament’s core business processes and eliminate non-value adding paper tasks.
- Improved quality through the delivery of the right information at the right time.
- Improve administrative efficiency and effectiveness.
- Assist in monitoring and managing performance through reporting.
- Increased productivity and decision-making.
- Reduce operational costs through a reduction in paper costs, paper management costs and paper storage costs.
- Enable promotion of access to information for external customers/stakeholders.
- Enable Parliament to meet legislative and other regulatory requirements

2.10 Security of data on PCMS

PCMS ensures that all content is stored in a secure and controlled Central Repository. By default, documents are stored in PCMS so that all users have full access to them. If no security is added to a document by the person who saves it into the Central Repository, everyone will be able to view it. In order to restrict access as other documents are sensitive in nature, it is important that whoever is working on documents must specify the level of security by completing a profile form when adding the document. These different classification levels allow the users to classify documents accordingly to ensure that only users with a specific classification clearance will have access to the documents (The Parliament of the Republic of South Africa, 2006). Below is the classification of some of the access rights and their descriptions.

Table 3: Description of access rights of documents in PCMS

Access rights	Description
View Profile	Allows the trustee to view, but not edit, the Document Profile.
Edit Profile	Allows the trustee to view and edit the Document Profile.
View Document	Allows the trustee to view the contents of the document.
Edit Content	Allows the trustee to check the document out to make changes and check the document back in.
Copy	Allows the trustee to retrieve a copy of the document and save it as a new document. Trustees cannot edit the original document or profile.
Delete	Allows the trustee to delete the document.

Adapted from The Parliament of the Republic of South Africa (2006:13)

Users are not allowed to delete documents in the Central Repository. Users will have to queue a document for deletion, this will send the document to an administrator who will also first verify with the creator of the document if the document has to be deleted and only then will the document be deleted out of the repository. However documents that are filed in the file plan will not be deleted by the administrator, the retention schedules placed on the record will serve as the only guideline on whether the record can be destroyed or not (The Parliament of the Republic of South Africa, 2006).

2.11 Economics of KM and PCMS

Moballegghi and Moghaddam (2011:316) view Knowledge Management as “the set of systematic and disciplined action that an organization can take to obtain the greatest value from the knowledge available to it”. They further indicate that it is important that the organization must understand its knowledge assets and how to maximize profit from them. Moshari (2013:2) adds that “an organization's success to a great extent depends on its capability to leverage knowledge and produce value from its knowledge resources”. The Parliament of the Republic of South Africa, like any other organization, realized the importance of tapping into this resource in order to fulfil its mandate.

The Parliament of the Republic of South Africa is the Legislative arm of the State. The legislative authority is vested in it (Sisulu (2013).” Heywood (1997:335) adds that “Legislatures are place where national issues, policies and other important issues are debated and scrutinized openly”. Heywood (1997) further asserts that it is the responsibility of parliament to represent the needs of the people and also to ensure that “public policy is carried out to ensure that it remains consonant with the aspirations of the Nation as a whole”. Rather than making legislation, oversight is also another function that has been vested in the South African Parliament by the Constitution. Sisulu (2013:27) states that “The Constitution envisages a stronger check, as it demands accountability to the democratically elected legislature” and it also emphasises that the elected executive is directly answerable to Parliament. Parliament realised that it was difficult to fulfil its mandate due to the following challenges:

- Difficulty in tracking the stages of certain Parliamentary tasks and accessing the Parliamentary programme with its relevant documentation
- Difficulty in managing Parliament’s documentation effectively and efficiently
- Time wasted storing, filing & retrieving information from manually managed documents
- Difficulty in sharing information across the institution and the country
- Time wasted locating information that supports Parliament’s oversight role and decision making

- Difficulty in tracking and monitoring Parliament's resolution requiring Executive action or response
- Difficulty in establishing and monitoring public entities which must account to Parliament
- Difficulty in ensuring that members have access to Parliamentary information while outside of Parliament

In order to address the above challenges, a decision was made to invest in PCMS. Knock (2012) indicates that managers in organisations sometimes, even prior to the implementation of KM initiatives, ask KM leaders to estimate the return on investment that a Knowledge Management Implementation programme might bring. Moballegghi and Moghaddam (2011:316) add that to successfully measure organizational knowledge, knowledge must be measured. McManus and Snyder (2003) assert that "while many organizations are discussing the value of KM systems, few have determined the best methodology to measure this perceived value." They further stipulate that "to measure intellectual asset management, KM must be defined in terms of business objectives"; without tangible objectives, organisations find it difficult to measure KM.

Although PCMS implementation and support cost could not be made available upon request by the researcher, from the responsible manager, it is important that Parliament derives value on this investment. To ensure that Parliament derives value on this investment, Parliament needs to measure the Return on Investment (ROI). Botchkarev and Andru (2011:245) assert that "ROI analysis when applied correctly is a powerful tool for evaluating information systems and making informed decisions on software acquisitions and other projects." Measuring ROI will assist Parliament by:

- Providing a rationale for future investment and acquisition decisions
- Evaluation of existing systems (PCMS)
- Access performance of business units

Botchkarev and Andru (2011:247).

2.12 Conclusion

The literature review reveals that Knowledge Management, as a strategic tool, has benefits for the organization that applies it. The effective use of KM helps organizations to use knowledge as a means of gaining a competitive edge, and also to assist organizations to render their services in a lean manner. The success or failure to implement this strategic tool in an organization is dependent on a number of interlinked factors. Organizations must carefully consider these factors prior to implementation, in order for KM initiatives to be implemented successfully.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This section outlines the following: research approaches, research design, sampling strategy, data collection methods, data analysis and interpretation, validity and reliability. The researcher employed the principles of qualitative as well as quantitative approaches.

3.2 Research design

Thyers, cited by De Vos, (1998:123) views research design as a “blue print or detailed plan for how a research study is to be conducted”. This is further supported by Babbie (2008:96) who denotes that in the research design, the researcher determines what to observe and analyse: the “why” and “how”. The research adopted the descriptive case study design.

3.2.1 Case Study

Baxter and Jack (2008: 544) define the case study approach as “an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources”, thereby ensuring that the issue explored is approached from different angles. In the case of a single case study, Hitchcock and Hughes (1995:317) state that it offers an opportunity of an in-depth analysis and understanding of the case. They went further to indicate that it also helps the researcher to understand the social behaviour and factors influencing the situation within a particular setting. LOD has been selected for this study from within the ambit of the Parliament of the Republic of South Africa, to offer an in-depth understanding of the factors which are contributing towards the effective and/or ineffective use of PCMS within the division.

Yin (2003) cited by Baxter and Jack (2008: 545) asserts that the case study design is suitable when the researcher wants to answer “how” and “why” questions. The researcher cannot influence the behaviour of the respondent when the researcher believes that the background information is fundamental for the research or when the “boundaries are not clear between the phenomenon and context”. In this study the research responds to how PCMS is used, why it is has been used in this manner and how it can be utilised better.

Like any strategy it has its advantages and disadvantages. Hitchcock and Hughes (1995: 317) indicate that a case study offers the following advantages:

- ✚ Rich and vivid description of events in the case under study;
- ✚ Chronological narration of events;
- ✚ Unification between the description and analysis of events;
- ✚ A focus on groups of actors and their perception of events;
- ✚ A focus on specific events; and
- ✚ The case is presented by the researcher in a way that it captures the richness of the case.

The ability of a case study to provide the researcher with a vivid description and in-depth analysis of events is critical to this research. It will assist the researcher with an in-depth examination of the challenges that the employees in the division have when it comes to PCMS usage.

Cohen, Manion, and Morrison (2007) assert that the disadvantage of the case study is that the findings cannot be generalised.

Soy (1997) states that the “critics of the case study method believe that the study of a small number of cases can offer no grounds for establishing reliability or generality of findings. Others feel that the intense exposure of the case biases the findings. Some dismiss case study research as useful only as an exploratory tool. Yet researchers continue to use the case study research method with success in “carefully planned and crafted studies of real-life situations, issues, and problems”. This study used a descriptive form of the case study to provide an in-depth

understanding of the smaller cases. The research findings will not be generalised to the whole institution.

3.3 Research approaches

3.3.1 Mixed method approach

This study used the mixed method approach. Johnson and Onwuegbuzie (2004:17) define mixed method research as “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language in a single study”. According to Johnson and Onwuegbuzie (2004:14-15), the mixed method research’s aim is to “draw from the strengths and minimize the weaknesses of both in single research studies and across studies”. This is supported by Creswell (2009:203) who indicates that the goal of the mixed method is to use the strength of both quantitative and qualitative research to provide a better understanding of research problems. Johnson and Onwuegbuzie (2004:16) went further to state that the “mixed position allows researchers to mix-and-match design components that offer the best chance of answering their specific research questions”. The above-mentioned statements have impelled the researcher to opt for the mixed approach, as it enabled the researcher to borrow from the richness of both methodologies in answering the research questions and addressing the research problem. The mixing of the methodologies occurred during data collection. Data analysis and interpretation of data is mainly quantitative.

3.3.2 Qualitative research approach

Creswell (2009:4) asserts that the qualitative research approach is used “as a means of exploring and understanding the meaning an individual or groups ascribe to a social or human problem”. The approach focuses on the way people understand and interpret the world they live in. McMillan and Schumacher (2006:315) further indicate that a qualitative study provides interaction between the researcher and the persons involved in the situation under investigation. The approach allows the researcher to gain a deeper understanding of the respondents’ feelings about the situation in which they find themselves in. The approach emphasises the notion of

social-constructed meaning by groups or an individual within the area of study. The qualitative approach had assisted the researcher to ascertain the real issues leading to the effective and/or ineffective use of PCMS within LOD, as perceived by those who work with PCMS.

3.3.3 Quantitative research approach

Terre Blanche, Durrheim and Painter (2006:47) avow that quantitative research involves the collection of data in the form of numbers and the analysis of data by using statistics. Information within the area of study in quantitative research is collected, amongst others, through observation and using questionnaires. This standpoint is supported by Welman, Kruger and Mitchell (2005), they view quantitative research as research aimed at reducing ambiguity through the use of - amongst others - statistics, observation scales and questionnaires. A quantitative approach to this research helped the researcher during data collection, as the researcher used questionnaires, and during data analysis as tables and graphs were used to analyse data.

3.4 Population of study

The population of the study was the employees of LOD in the Parliament of Republic of South Africa.

3.5 Data collection

Data collection is vital in any research type. Collecting valid data ensures the research to be precise and honest. Incorrectly captured data impacts negatively on the results and as such they become invalid (Clinical Tools, 2006).

3.5.1 Data collection methods

Collected data can either be primary data or secondary data in the research. Primary data includes data collected through observation, focus groups and documentary analysis; secondary data is data that is collected amongst others, from books, magazines, journals and reports (Winstanley, 2009 and Hussey and Hussey, 1997).

Hussey and Hussey (1997:140) stipulate that there are various methods that one can use when collecting data, namely focus groups, diaries, interviews, observation, questionnaires, critical incident techniques and protocol analysis. The concurrent triangulation strategy of the mixed method approach has been used by the researcher to collect qualitative data - using semi-structured interviews, documentary analysis and a survey questionnaire as a quantitative research data collection method (Creswell, 2009).

3.5.1.1 *Survey Questionnaires*

Terre Blanche, Durrheim and Painter (2006:489) assert that a questionnaire is a “group of written questions used to gather information from respondents”. De Vos as cited by Saunders, Lewis and Thornhill (2003:280) stated that “each person is asked to respond to the same set of questions in a predetermined order”. Vogt (1993); De Vos (2002:172) as cited by Terre Blanche, Durrheim and Painter (2006:484) affirms that the questionnaire is the one technique that is most used for data collection in social sciences research.

The main aim of using any data collection tool is to answer the research questions and achieving the outlined research objectives. De Vos, Strydom, Fouche and Delport (2002:175) maintain that it is crucial for any researcher to know exactly what information needs to be gathered before a questionnaire is structured, as it affects the validity, response rate and reliability. In order to get maximum responses to the questions, the following principles must be followed:

- Questions must be brief and clear.
- Questions and response alternatives must be clear and not biased.
- Each question must have one main idea.
- Each question must be relevant to the research purpose.
- The questions must be sequenced from non-threatening to sensitive.

Baruch and Holtom (2008:1140) state that, “questionnaires can provide insight into individual perceptions and attitudes as well as organizational policies and practices”. Questionnaire enabled the researcher to understand how LOD employees view PCMS. Questions in the questionnaire can be both open-ended and close-ended

questions. Open-ended questions provide the researcher with information from the respondent that might not be easily tapped with categories in the pre-coded list, as this style of questioning offers the respondent an opportunity to give his/her own answers. Close-ended questions offer respondents a range of answers to choose from (Welman, Kruger and Mitchell, 2005). The researcher used closed-ended questions. Babbie & Mouton (2006) maintain that close-ended questions are popularly used as they provide a greater uniformity of responses and they are more easily processed.

The main reason for choosing a questionnaire was to gather data from the employees about the challenges they encounter when using PCMS. It was also used to establish contributory factors for the inadequate use of PCMS.

3.5.1.2 *Semi-structured interview*

Harrell and Bradley (2009) see an interview as a one-on-one discussion between an interviewer and an individual, to gather information on the topic of interest. Semi-structured interviews make use of interview guides, which have a list of topics and aspects of the topics related to the research topic. The list works as a guide during the interview process. The researcher may vary the order of the questions depending on the manner in which the interview unfolds, and additional questions may be asked to explore the research question and research objectives (Welman, Kruger and Mitchell, 2005). The advantage of the semi-structured interview is that it “offers a versatile way of collecting data”. The interviewees are given the freedom to express their views (Welman, Kruger and Mitchell, 2005:167). Semi-structured interviews were utilised to collect data from PCMS staff, to give the researcher an overall picture of the training processes and the usage of PCMS by people who work with it daily - as the researcher does not work with PCMS.

3.5.1.3 *Documentary analysis*

Ritchie and Lewis (2003:35) as cited by De Vos, Strydom, Fouche and Delport (2011:377) define documentary analysis as “the study of existing documents, either to understand their substantive content or to illuminate deeper meanings which may be revealed by their style and coverage”. Documents that the researcher read

include project charter, functional specification documents of PCMS and the strategic plan of Parliament. These documents assisted the researcher to validate the information collected through the questionnaire. Documents like the project charter informed the researcher of the overall objectives of PCMS and thus guided the researcher to establish whether the intended objectives of PCMS were being achieved. The functional specification document enabled the researcher to acquire an in-depth understanding of PCMS as the vehicle for the KM initiative and also to learn what it offers. Data was also collected from PCMS statistics which are captured on a monthly basis, to give the researcher an overview of the current usage of PCMS by LOD staff.

3.5.1.3.1 Sampling

Neuman (2011:219) avows that a sample is “a smaller set of cases a researcher selects from a larger pool and generalises to the population”. The primary aim of sampling procedures is to obtain a representative sample of the population in order to generalise the findings to the entire population. Terre Blanche, Durrheim and Painter (2006:49) add that, for the sample to be representative, “the researcher must ensure that the sample is large enough as a very small random sampling may be quite unrepresentative, and the same is true for a large non-random sample”. The population size of the LOD employees is simply too large to be interviewed in its entirety. Simple random sampling was used to select respondents. Simple random sampling offers an opportunity where “every case in the population has an equal chance of being randomly selected” (Terre Blanche, Durrheim and Painter, 2006:50). At the time of conducting the survey, the LOD staff complement was 495 excluding vacancies. One hundred and seventy questionnaires were distributed to the employees of the LOD section on the first day of the week. Questionnaires were issued to three sections, namely Language Services Section, Committee Section and Information Services Section. The Leader of Government Business Section only has two employees who could not be reached on the day of the questionnaire distribution. Respondents were given a week to complete the questionnaire. The researcher collected the completed questionnaires every morning until the last day of the collection. The researcher managed to collect 105 of the 170 questionnaires which were distributed, and analysed them.

3.5.2 Data analysis and interpretation

As already indicated that the research has adopted the mixed method approach, both quantitative and qualitative data were obtained by using questionnaires and semi-structured interviews. Data was analysed using the quantitative method through creating simple tables or diagrams which illustrated the frequency of occurrence, and establishing a relationship between the variables (Saunders, Lewis and Thornhill, 2003). An excel spreadsheet was used for data analysis. Responses were entered into various columns and rows which made it easy for the researcher to calculate. Data was then presented via charts and graphs.

3.5.3 Validity

It is stated by De Vos *et al.* (2002) that validity refers to the extent by which the instrument of measurement measures what it is supposed to measure. Welman, Kruger and Mitchell (2006) add that validity is the extent by which the research findings accurately represent what is actually happening in the area of study. Below are the common classifications of validity indicated by various authors (Welman *et al.*, 2006; De Vos *et al.*, 2002):

- **Content validity:** this relates to face validity and gauges the accuracy of the instruments in measuring the factors concerned with the study.
- **Construct validity:** refers to determining the extent by which the instrument used to measure the variable has indeed measured it. It is concerned with what the instrument is measuring, as well as how and why it has to measure the way it does. To validate the data, data is collected from various sources.
- **Criterion validity:** refers to the degree that diagnostic and selection measurement tests correctly predict the relevant criterion.
- **Face validity:** refers to a situation where questions are scrutinized to establish their relationship to the subject under discussion.

Face, content and construct validity were used in this research. Questions for both the interview and questionnaire were structured in such a manner that they corresponded to the aim of the research and also measured what they should

measure. The research questions were given to experts in the field to determine their suitability; the experts were also allowed to make suggestions before the questionnaires were distributed and the interviews were scheduled.

Cohen, Manion, and Morrison (2007) assert that validity also involves choosing the right methodology to answer the research questions. The researcher also used triangulation to validate the data. Schell (1992) argues that versions provided by actors may be conflicting and inconsistent due to the desire of actors to manipulate the results, as some of the actors may be subjective. It is important that the researcher guards against this when conducting the research by using concurrent triangulation. Triangulation is viewed by De Vos, Strydom, Fouche and Delport (2002) as the use of different instruments to measure the same phenomena. The researcher used questionnaires, interviews and documentary analysis to collect data in order to ensure validity.

3.5.4 Reliability

Welman, Kruger and Mitchel (2006:145) maintain that “reliability is concerned with the findings of the research and relates to the credibility of the findings”. DeVos, Strydom, Fouche and Delport (2002:168-169) argue that reliability is dependent “not on what is measured but on how well it measured”. They went further to argue that in verifying reliability, the instrument of measurement will be reliable if it can be applied repeatedly in the same context, or under comparable conditions, and still yield the same results. The researcher used interviews and documentary analysis to aid in procuring more information to confirm data and to increase reliability. In order to increase reliability, it is also important to conduct a pilot study.

3.5.5 Pilot Study

Cohen, Manion, and Morrison (2007) assert that piloting aims to increase reliability, validity and practicability of the questionnaire. Terre Blanche, Durrheim and Painter (2006: 94) maintain that “pilot studies help to identify the potential problems within the design, particularly the research instrument”. The outcomes of the survey are not

necessarily recorded. This is further supported by Welman, Kruger and Mitchell (2005) who posit that in a pilot study, the research instrument is used on a limited number of people with the intention of identifying flaws in the research instrument and to detect ambiguous and unclear items. A pilot study was conducted in the interpreting unit; the questionnaire was administered to ten people in order to detect any flaws in the instrument and also to ensure that the instrument measures what it is supposed to measure. Changes were made to the questionnaire (See Appendix C for final questionnaire and Appendix D for the pilot questionnaire). The results of the pilot study were not recorded.

3.6 Ethical consideration

When conducting any research study, it is important for the researcher to consider ethical issues. DeVos, Strydom, Fouche and Delport (2011) view ethics as a set of moral principles that guide the behaviour of people who are involved in the research study processes. De Vos, Strydom, Fouche and Delport (2011: 113) posit that “research should be based on mutual trust, acceptance, cooperation, promises and well-accepted conventions and expectations between all parties involved in the research project”. The researcher considered ethical issues in all processes of conducting the research. The research considered the following ethical issues as highlighted by De Vos, Strydom, Fouche and Delport (2002: 64-67), namely:

- Avoidance of harm;
- Voluntary participation and the ability to withdraw their participation;
- Informed consent;
- Deception of subjects and respondents;
- Violation of privacy, anonymity and confidentiality of respondents; and
- Permission to conduct the study from the relevant authority.

3.7 Timeline of the Study

The research was conducted over the period indicated below.

Table 4: Timeline

From	To	Activity
March 2012	May 2012	Drafting of the proposal
June 2012	June 2012	Finalise the proposal
July 2012	July 2012	Submit the final proposal
August 2012	August 2012	Defending the proposal
September 2012	September 2012	Finalising Chapter one
October 2012	January 2013	Literature review (Chapter 2)
February 2013	February 2013	Finalise chapter on Literature review
March 2013	April 2013	Finalise chapter on Research methodology
May 2013	May 2013	Data collection
June 2013	July 2013	Data Analysis
August 2013	September 2013	Research Findings and Analysis
October 2013	October 2013	Submit draft research report
November 2013	December 2013	Resubmit draft research report for final revisions
January 2014	January 2014	Submit final research report

3.8 Conclusion

This chapter has given a broader understanding of research design and methodology for collecting and analysing data. The chapter also outlines the ways that the researcher ensured that the study is ethical and that potential limitations are eliminated from the study. The next chapter will provide a statement of findings and the analysis of data regarding the responses from the 101 employees of LOD.

CHAPTER 4

DATA INTERPRETATION AND ANALYSIS

4.1 Introduction

This chapter presents the results of the data analysis, and reports on the findings of the study. Tables and figures have been labelled to clearly outline what had been discussed regarding the findings, and to make it easier to follow the discussion based on the data presented. The analysis is based on the 105 collected out of 170 distributed questionnaires. The total number of respondents varies for the different questions therefore the specific number of responses are indicated for each question followed by the percentage in a table format.

4.2 Data analysis

4.2.1 *Demographics of the respondents*

Table 5: Demographic information

Variable	Frequency	Percentage
Gender		
Male	52	50
Female	53	50
Years of Experience		
Less than a year	11	10
1-5 years	50	48
6-10 years	25	24
11 and more	19	18
Section		
Language Services Section	46	44
Committee Section	34	32
Information Services Section	25	24

4.2.1.1 Gender of the respondents

Figure 7: Gender of respondents

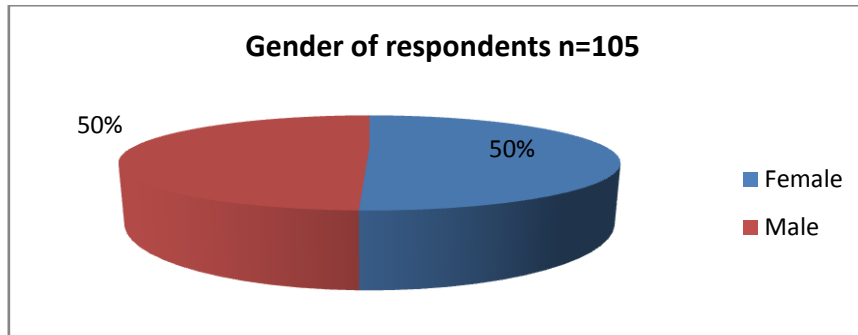


Figure 7 indicates that the gender of respondents is 50% for both male and female.

4.2.1.2 Years of experience of the respondents

Figure 8: Years of working experience for respondents

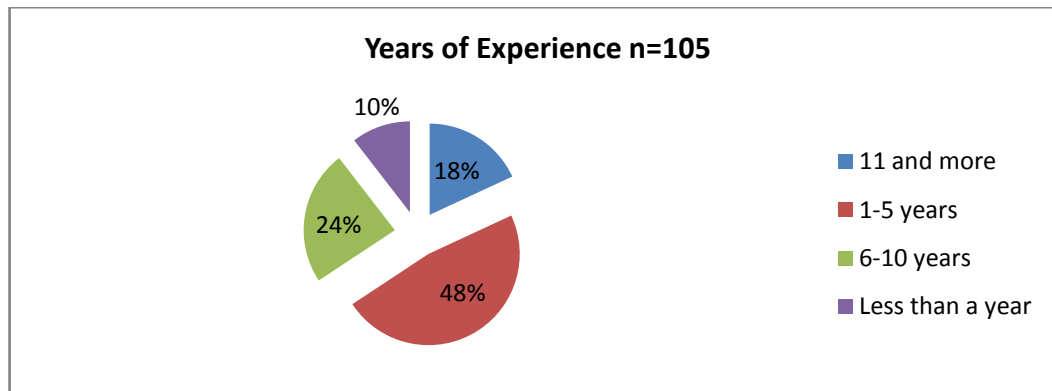


Figure 8 indicates that respondents with 1-5 years of working experience in Parliament's LOD constitutes the highest percentage which is 48%, this is followed by those with 6-10 years of experience who constitute 24%. The figure also shows that 18% of the respondents are those which have 11 and more years of experience, while those who have less than one year constitute 10%.

4.2.1.2 Sections of the respondents within the LOD

Figure 9: Total percentage of respondents per Section

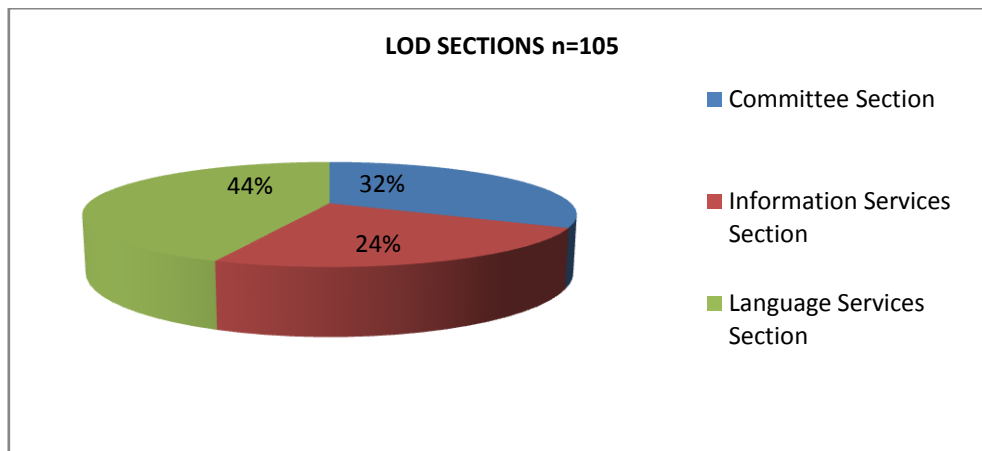


Figure 9 shows that 44% (46) of the respondents are from the Language Services section, while 32% (34) are from the Committee Section and 24% (25) are from the Information Services Section.

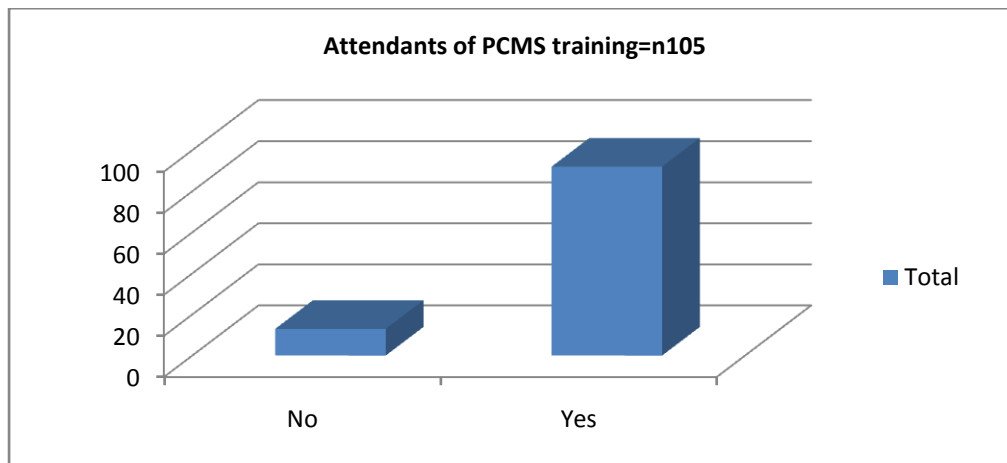
4.2.2 PCMS training attendance

Table 6: PCMS Training attendance

Variable	Frequency	Percentage
Have you attended any PCMS training?		
Yes (if yes, answer questions 4 to 7)	92	88
No (if no, answer questions 4 and 8)	13	12
If Yes How many times?		
Once	46	49
Twice	39	42
Three times	8	9
How was the training conducted?		
Group	86	93
One on one	5	5
Both	2	2
When did you last attend PCMS training?		
Before 2010	26	28
2010	12	13
2011	31	33
2012	16	17
2013	8	9
If No , select the appropriate answer(s)		
I do not understand what PCMS is about	8	61
We do not use PCMS in our team/unit/section	4	31
My manager does not support the use of PCMS	1	8

4.2.2.1 Participants' attendance of PCMS training

Figure 10: Attendance of PCMS training



Bar graph chart figure 10 shows that 88% (92) of the respondents have attended PCMS training while 12 % (13) of the respondents have not attended PCMS training. The figure shows that PCMS training is extended to almost all employees as there are a higher percentage of employees who have attended PCMS training than those who did not attend.

Figure 11: Frequency of PCMS training attendance

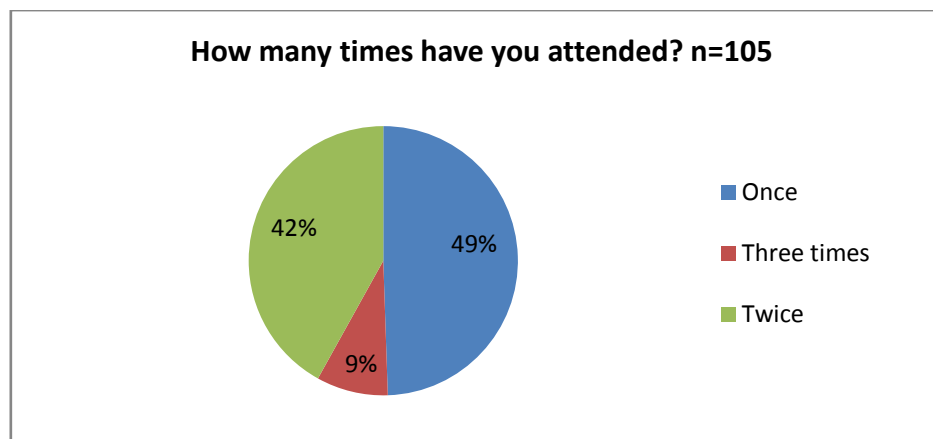
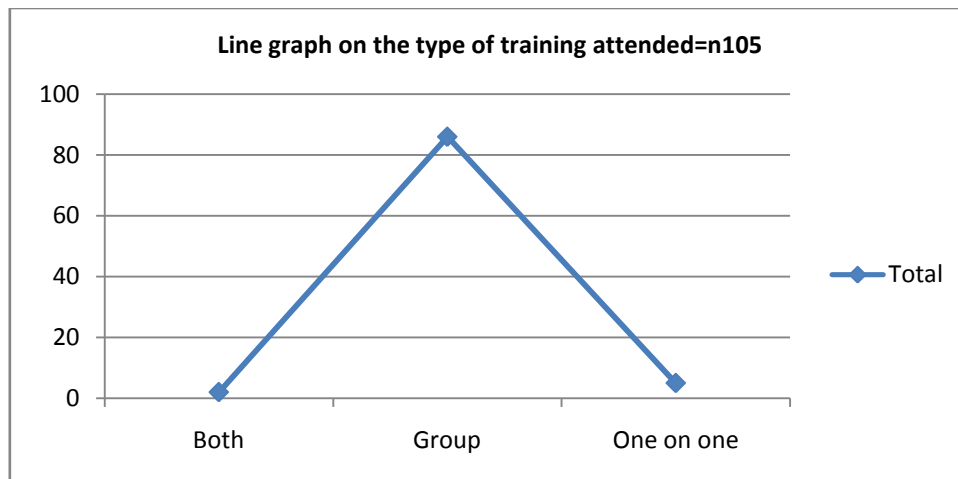


Figure 11 indicates that of all the people who attended PCMS training - 49% (46) attended training once, 42% (39) attended PCMS training twice and 9% (8) attended three times. This shows that 51% of the respondents attended PCMS training more than once.

Figure 12: Type of training attended



Line graph figure 12 indicates that 93% (86) attended group training, while 5% (5) attended one-on-one training sessions. Two percent (2) attended both one-on-one and group PCMS training.

Figure 13: Year on which training was attended

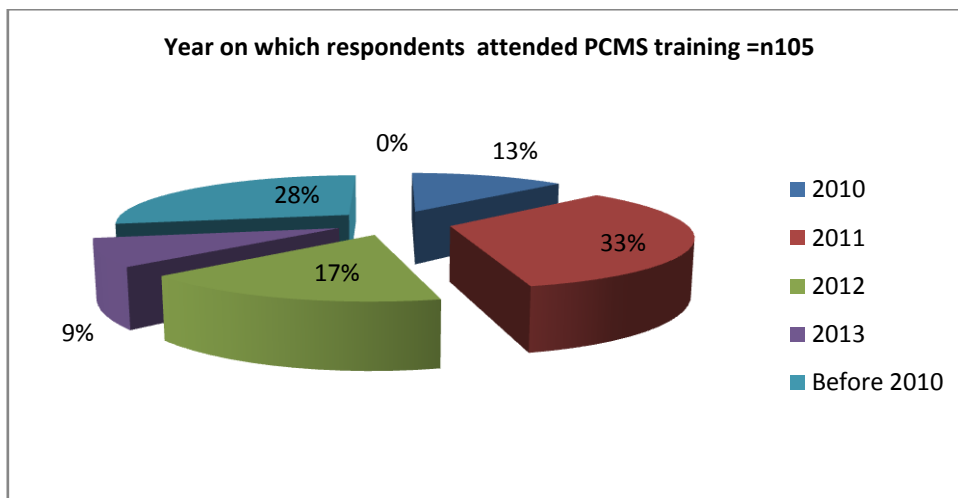


Figure 13 shows that of all the respondents who attended PCMS training, 28% (26) attended PCMS training before 2010; 13% (12) attended during the year 2010; 33% (31) attended in 2011; 17% (16) attended in 2012 and 9% (8) attended training in 2013.

Figure 14: Reasons for not attending PCMS training

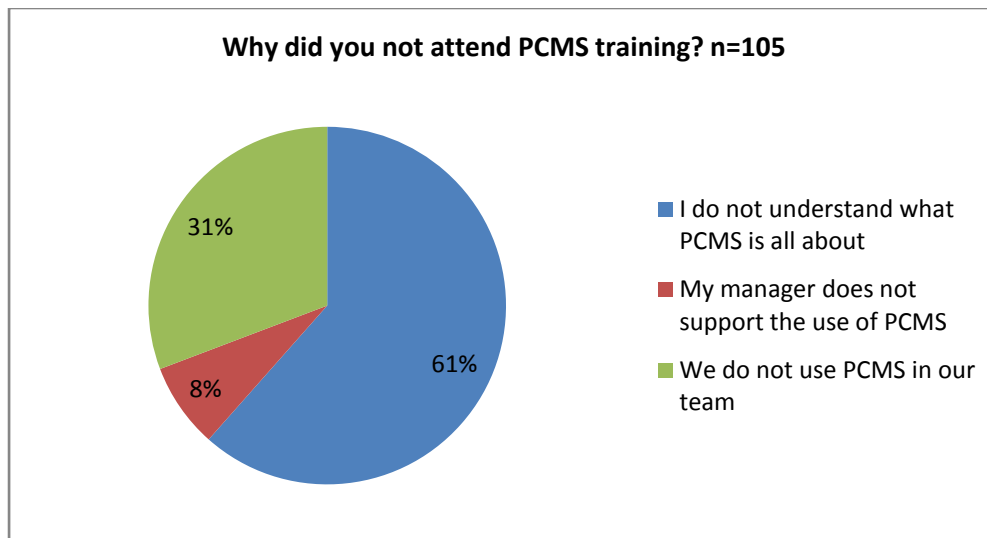


Figure 14 shows that 61% (8) of those who have not attended PCMS training, indicate that they do not understand what PCMS is all about. Thirty-one percent (4) indicate that they do not use PCMS in their team and 8% (1) indicate that the manager does not support the use of PCMS.

4.2.3 Use of PCMS

Table 7: Use of PCMS

Variable	Frequency	Percentage
Do you have PCMS on your		
Yes	81	82
No	18	18
Do you use PCMS?		
Yes	34	34
No	67	66
How often do you use PCMS?		
Daily when I do my tasks	1	1
Weekly when I do my tasks	3	22
Monthly when I do my tasks	8	8
Occasionally when I do my tasks	22	3
Never	67	66

4.2.3.1 PCMS on the computer

Figure 15 : Respondents with or without PCMS on their computers

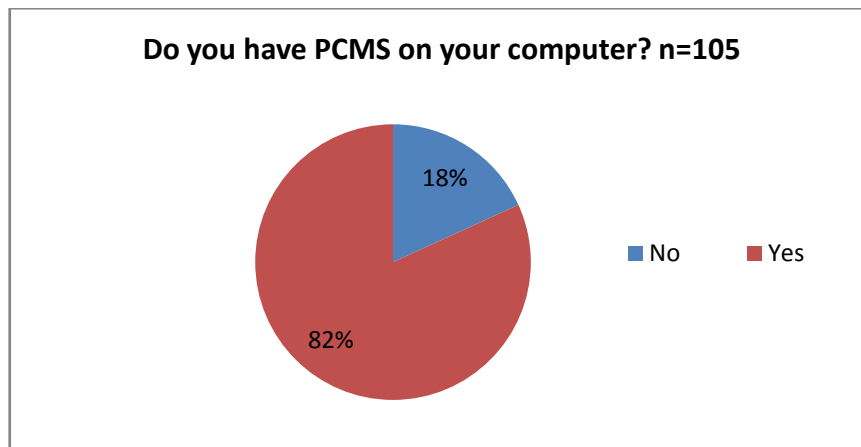


Figure 15 indicates that 82% (81) of the respondents have PCMS installed on their computers, while only 18% (18) do not have PCMS on their computers. The figure illustrates that of the 88% of the respondents who have attended PCMS, only 6% of those do not have PCMS on their computers.

4.2.3.2 Respondents use of PCMS

Figure 16: PCMS usage

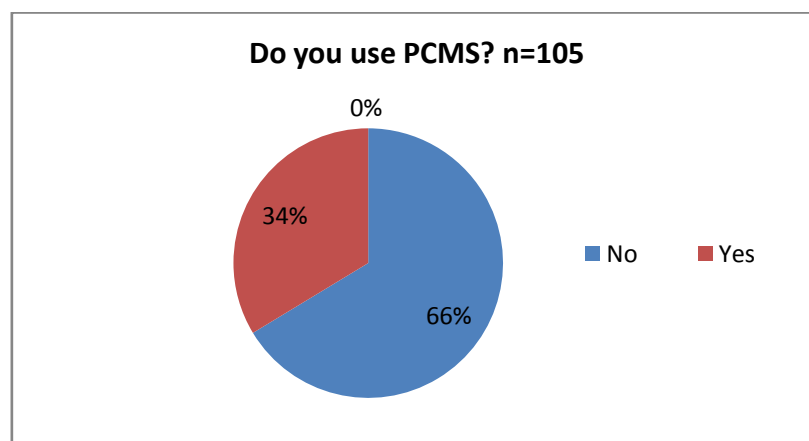


Figure 16 shows that of the 92 respondents who have attended PCMS training, 66% of the respondents do not use PCMS while 34% use PCMS. This is appalling as the use of PCMS by those who have attended training is less than 40%.

Figure 17: Frequency of PCMS usage

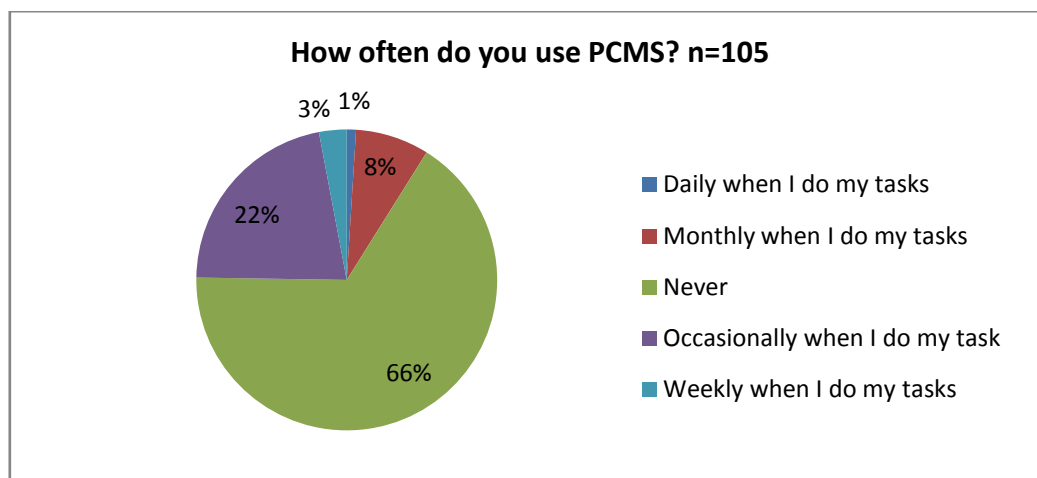


Figure 17 shows that 66% of the respondents who attended PCMS training have never used PCMS, 22% use it occasionally, 8% use it monthly, 3% use PCMS weekly and only 1% uses PCMS daily. This shows that PCMS usage is very low because of the 34% using it - only 4% are using PCMS optimally.

Table 8: Usage of PCMS per Section

Section	Total	Never	Occasionally	Monthly	Weekly	Daily	Blank
Language Services Section	46	39	4	0	1	0	2
Committee Section	34	11	12	6	2	1	2
Information Services Section	25	17	6	2	0	0	0

Data reveals that Committee Section has the highest number of PCMS users, followed by Information Services and then Language Services at the bottom. Of the 46 respondents from Language Services Section, only 5 employees use PCMS. Information Services has 8 out of 25 respondents who use PCMS. Committees Section has 21 out of their 34 respondents who use PCMS. The above numbers are also confirmed by the actual usage statistics for May and June 2013 below.

Figure 18: Number of users per section May and June 2013

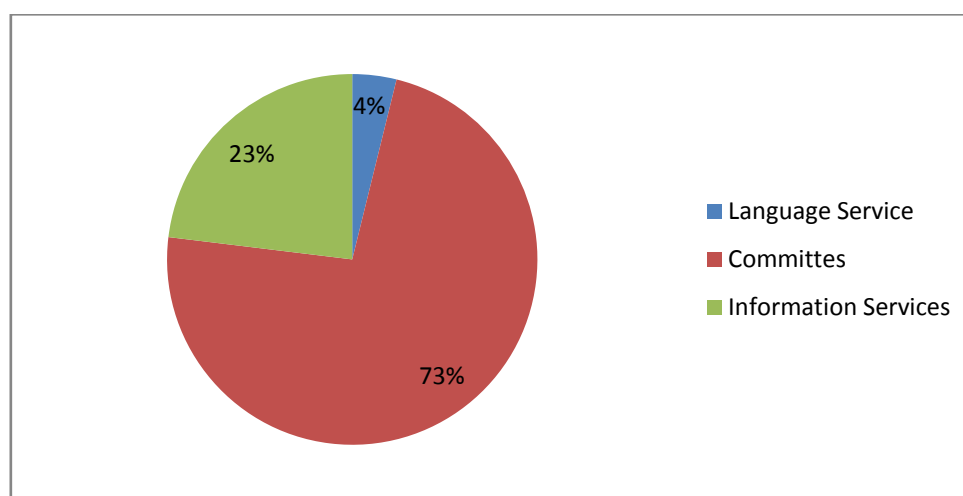


Figure 18 gives an overview of the actual usage statistics of PCMS by LOD employees for May and June 2013. The graphs indicate that of all employees in the Division who used PCMS in May and June 2013, 73% are from the Committee Section, 23% from Information Services Section and 4% from Language Services Section.

4.2.3 Objectives of PCMS

Table 9: Intended objectives of PCMS

Item	Strongly Agree		Agree		Not sure		Disagree		Strongly Disagree	
	Count	%	Count	%	Count	%	Count	%	Count	%
Use of PCMS increases knowledge sharing within the division.	6	6	32	32	47	46	7	7	9	9
PCMS use increases knowledge retention in the division.	9	9	27	27	53	52	7	7	5	5
PCMS provide instant access to relevant and useful information.	9	9	40	39	37	37	10	10	5	5

Figure 19: PCMS and knowledge sharing

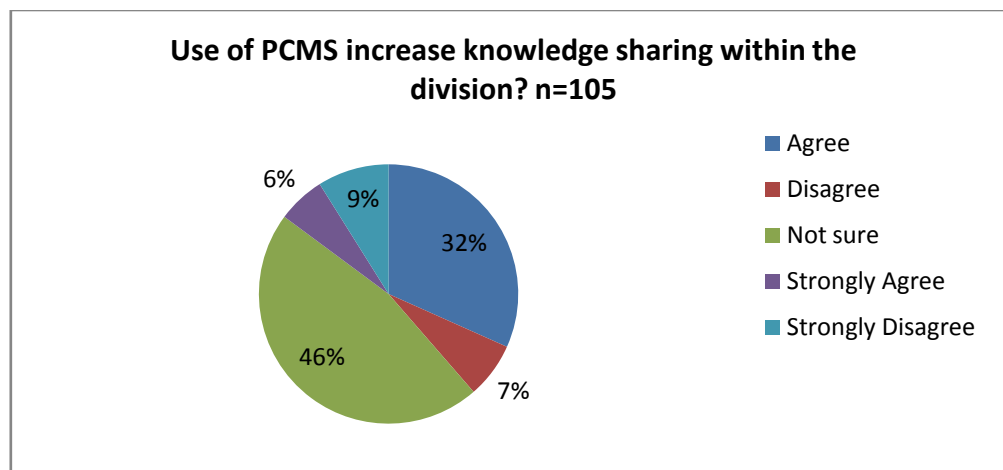
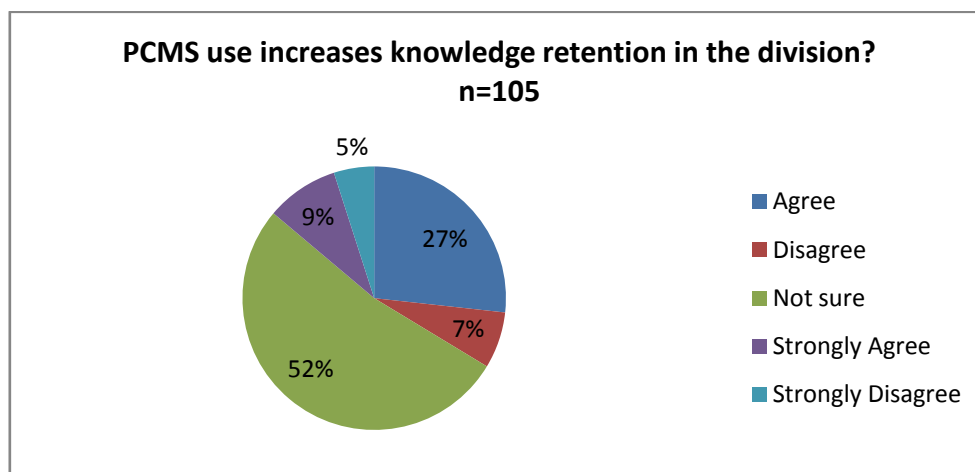


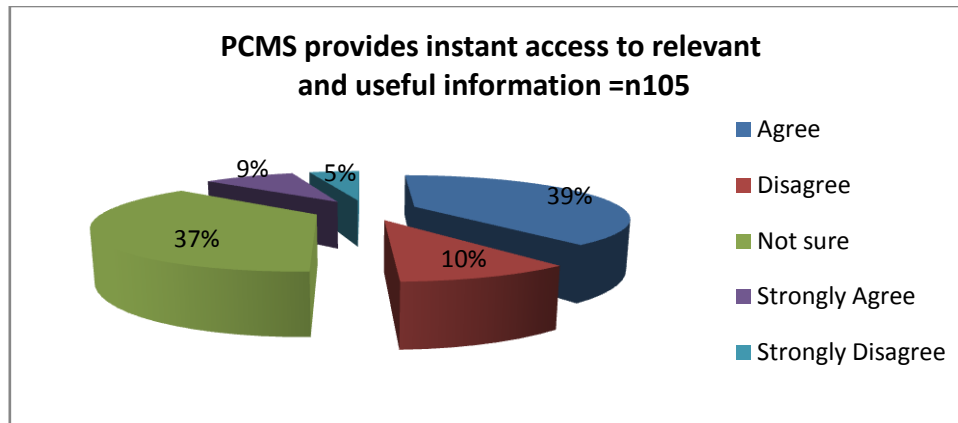
Figure 19 shows that 6% (6) of the respondents indicated that they strongly agree that the use of PCMS can increase knowledge sharing within the division, 32% (32) of the respondents agree with the statement and 46% (47) of the respondents were neutral. Nine percent (9) strongly disagree and 7% (7) disagree.

Figure 20: PCMS and knowledge retention



The pie chart figure 20 shows that 9% (9) of the respondents believe that the use of PCMS will increase knowledge retention in the division, whilst 27% (27) of the respondents agree with the statement. Fifty-two percent (53) of the respondents are neutral. Seven percent (7) disagrees with the statement whilst 5% strongly disagrees with the statement. Less than 40% believe that PCMS use can increase knowledge retention.

Figure 21: PCMS and access to information



The pie chart graph in figure 21 indicates that 9% (9) of the respondents strongly agrees with the statement that the use of PCMS provides instant access to relevant and useful information, 40% (39) of the respondents agree with the statement. Thirty seven percent (37) are not sure, 10% (10) disagrees and 5% (5) strongly disagrees.

4.2.4 Contributory Factors

Table 10: Contributory factors

Item	Strongly Agree		Agree		Not sure		Disagree		Strong Disagree	
	Count	%	Count	%	Count	%	Count	%	Count	%
I know and understand why PCMS was implemented.	10	9	53	51	31	30	7	7	3	3
PCMS training offered is sufficient to operate the system.	4	4	24	23	48	46	20	19	8	8
PCMS adds value to the manner I do my job.	5	5	18	17	44	43	26	25	10	10
PCMS is the right technological tool to foster knowledge retention and use in LOD.	8	7	27	26	58	56	6	6	5	5
PCMS is user friendly.	3	3	20	19	43	41	25	24	13	13
LOD Management supports the use of PCMS.	3	3	22	21	58	56	12	11	9	3
LOD management encourages Knowledge sharing.	3	3	28	27	40	39	21	20	11	11
Knowledge sharing is rewarded.	3	3	15	15	43	41	22	21	21	20
There is a culture of knowledge sharing in the LOD.	3	3	19	18	39	38	25	24	18	17
I know what Knowledge Management is all about.	5	5	55	53	33	32	7	7	3	3

Figure 22: Understanding why PCMS was implemented

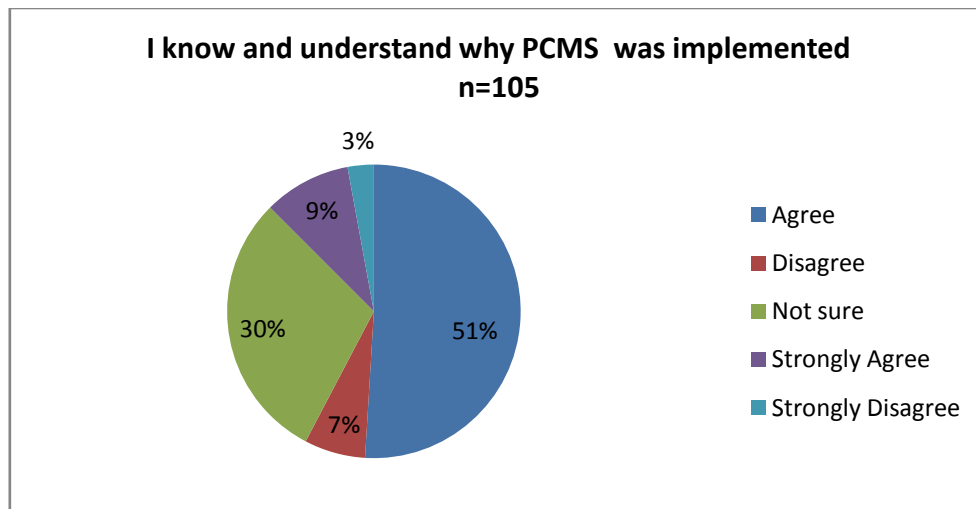
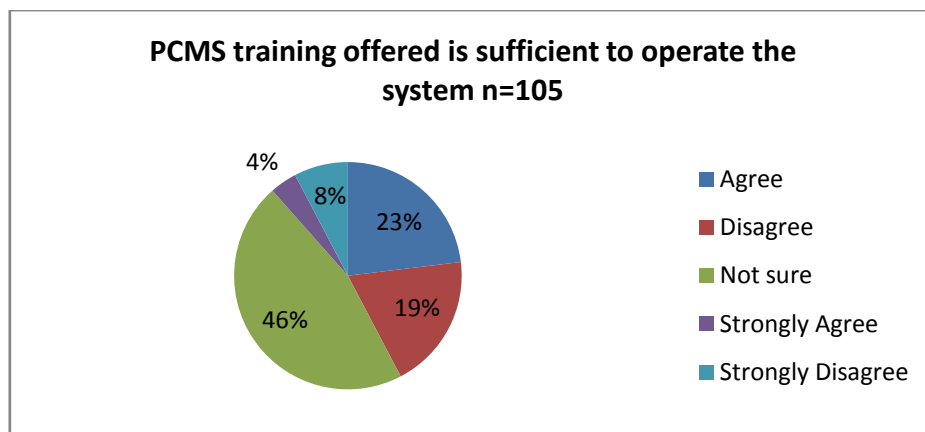


Figure 22 shows that 9% (10) of the respondents strongly agree with the statement that they know and understand why PCMS was implemented. Fifty-one percent (53) of the respondents agree with the statement. Thirty percent (31) are not sure, whilst 7% (7) disagrees and 3% (3) strongly disagrees.

Figure 23: Level of PCMS training



The pie chart graph in figure 23 indicates that 4% (4) of the respondents strongly agree with the statement that the PCMS training offered is sufficient to operate the system. Twenty-three percent (24) of the respondents agree with the statement, 46% (48) are not sure, 19% (20) disagrees and 8% (8) strongly disagrees. To increase the utilisation of PCMS, this area also needs attention as only 27% feel that the training offered is sufficient to operate the system. The remaining 73% are either neutral or disagree.

Figure 24: Value of PCMS to the users

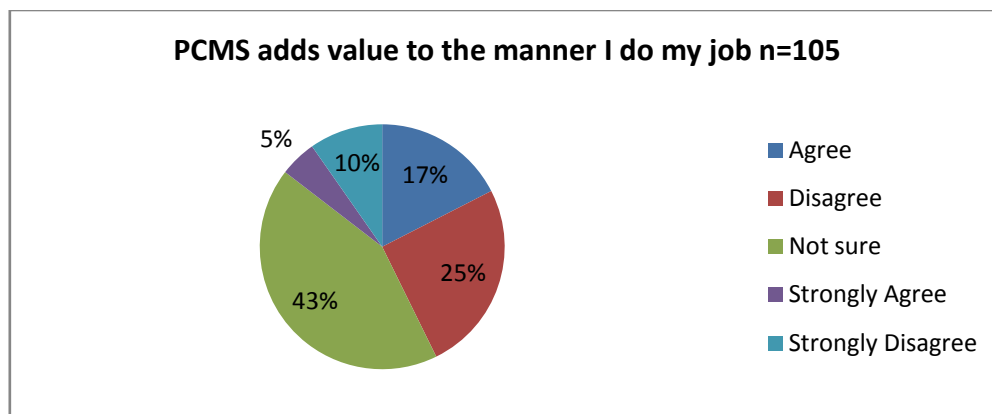
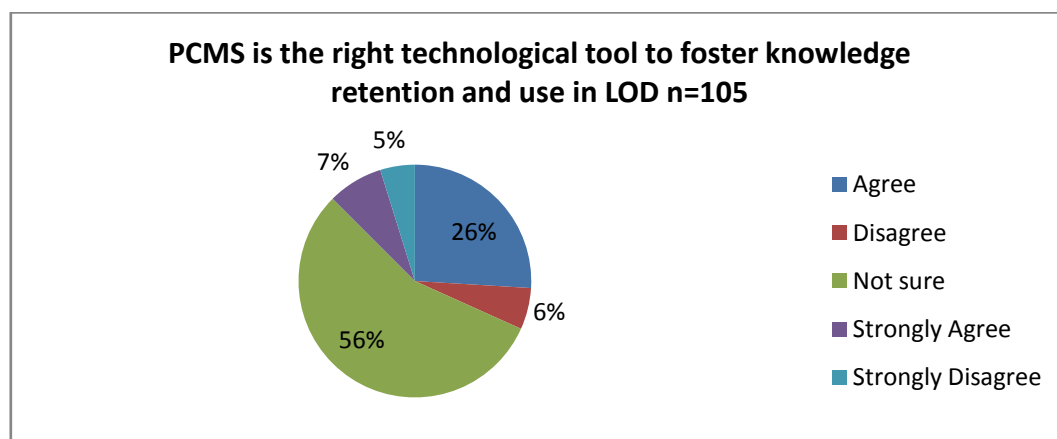


Figure 24 indicates that 5% (5) of the respondents strongly agree with the statement that PCMS adds value to the manner in which they do their work. Seventeen percent (18) of the respondents agree with the statement, 43% (44) are not sure, 25% (26) disagree and 10% (10) strongly disagrees. Only 22% of the respondents feel that PCMS adds value to the manner in which they do their work. In order for people to start using the system a lot more will have to done, because no-one will use a system that they feel does not add any value.

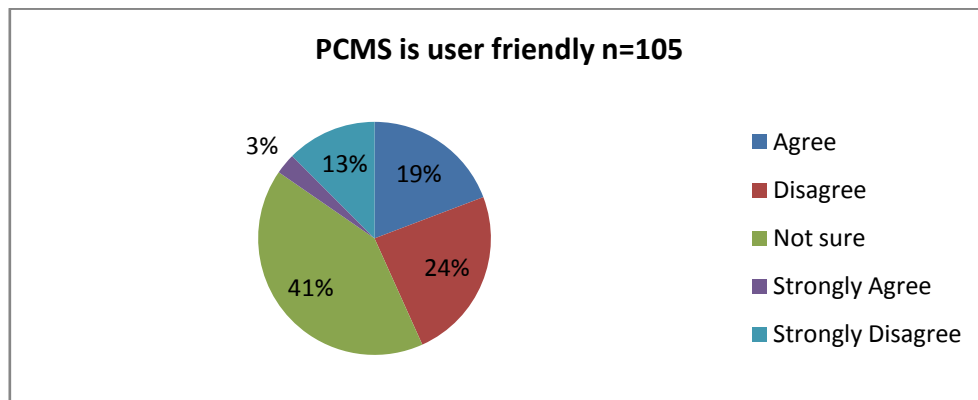
Figure 25: PCMS as a technological tool to foster knowledge retention



The pie chart graph in figure 25 shows that 7% (8) of the respondents strongly agrees with the statement that PCMS is the right technological tool for knowledge retention in the LOD section. Twenty six percent (27) of the respondents agree with the statement, 43% (37) are not sure, 25% (26) disagree and 10% (10) strongly disagrees with the statement. Less than 40% agrees with the statement that PCMS

is the right technological tool to foster knowledge retention. This area also needs attention because people will hardly use something that they do not believe in.

Figure 26: PCMS is user friendly



The pie graph in figure 26 shows that 3% (3) of the respondents strongly agrees with the statement that PCMS is user friendly. Nineteen percent (20) of the respondents agree with the statement, 41 % (43) are not sure, 24% (25) disagrees and 13% (13) strongly disagrees with the statement. Only 21% believe that PCMS is user friendly. This percentage is very low. If the majority of the users still feel that the system is not user friendly, then something has to be done to bring the users on-board.

Figure 27: Managers' support in PCMS usage

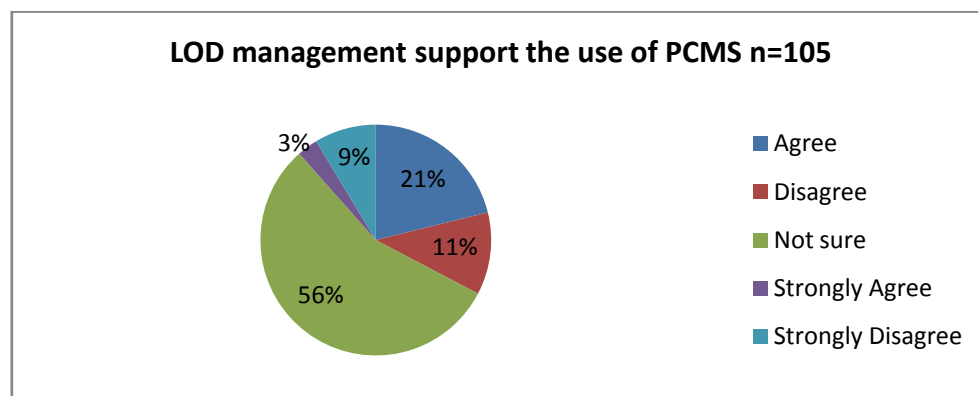


Figure 27's findings clearly outline that approximately 24% (25) feel that there is enough support from the managers for the use of PCMS. While 56% are not sure, 11% disagrees and 9% strongly disagrees. What is exciting about the findings is that 55% are silent on the issue and 20% feel that managers are not doing enough to

support the use of PCMS. Less than a quarter of the respondents feel that managers are doing enough, while more than two quarters of the respondents chose to be silent. The fact that the greatest percentage decided to remain silent on the issue, obliges one to understand that the respondents consider the issue serious enough to be unwilling to share their views with the researcher. One of the respondents, even though space was not provided for comments on the questionnaire, indicated in writing that he/she cannot answer that specific question because he/she considered it to fall within the ambit of the managers' responsibilities.

Figure 28: Knowledge sharing encouragement from LOD

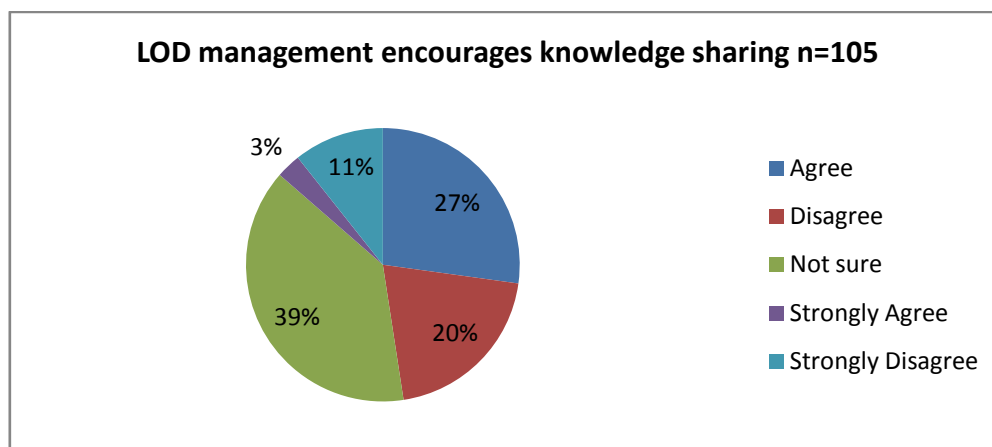


Figure 28 shows that 3% (3) of the respondents strongly agree that LOD management encourages knowledge sharing. While 27% (28) agrees with the statement, 39% (40) are not sure if management encourages knowledge sharing. Twenty percent (21) disagrees with the statement and feels that there is no strong support coming from the managers to ensure a favourable environment for knowledge sharing, and 11% (11) strongly disagrees with the statement. The figures show that only 30% agree that managers encourage knowledge sharing. The percentage is too low, and this is an indication that much more will have to be done to encourage knowledge sharing.

Figure 29: Rewards for knowledge sharing

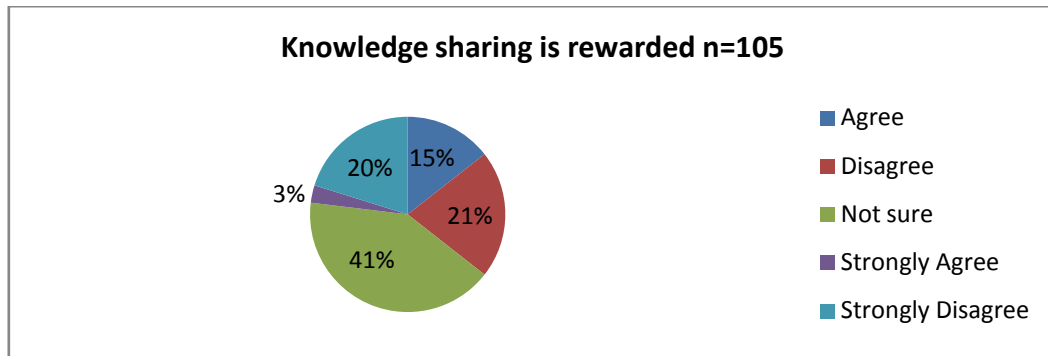


Figure 29 indicates that 3% (3) of the respondents strongly agree that knowledge sharing is rewarded and 15% (15) agrees with the statement. Forty-one percent (43) are not sure if knowledge sharing is rewarded, while 21% (22) disagrees with the statement and feels that there is no strong support from the managers to ensure a favourable environment for knowledge sharing and 20% (21) strongly disagrees with the statement. Less than 20% of the respondents believe that knowledge sharing is being rewarded. The very low percentage indicates that a lot more will have to be done in this area too.

Figure 30: Culture of knowledge sharing

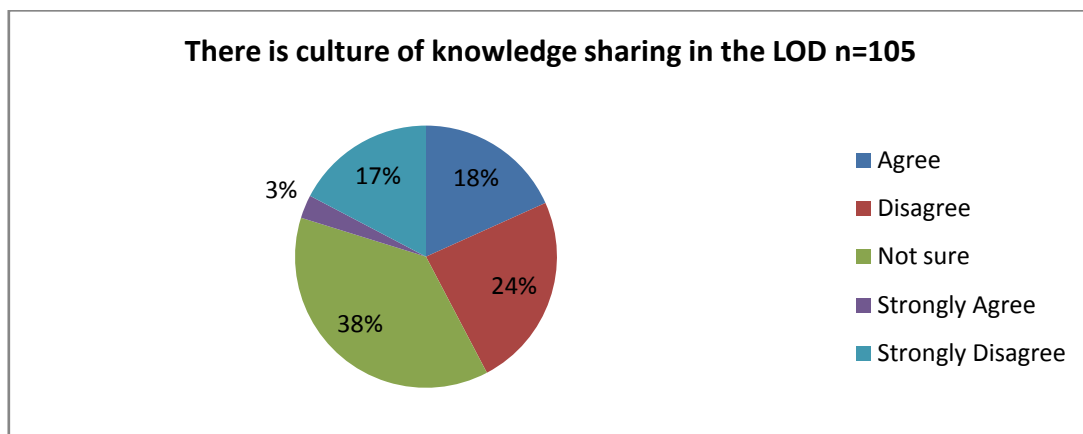


Figure 30 shows that 3% (3) of the respondents strongly agree that there is a culture of knowledge sharing in the LOD division. Eighteen percent (19) agrees with the statement. Thirty-eight percent (39) of the respondents are not sure, while 24% (25) disagrees and 17% (18) strongly disagrees with the statement. It is only 22% of the

respondents who feel that there is a culture of knowledge sharing in the division; the majority are either not sure or disagrees - which indicates that there is a need to instil a culture of knowledge sharing in the division.

Figure 31: Understanding of KM

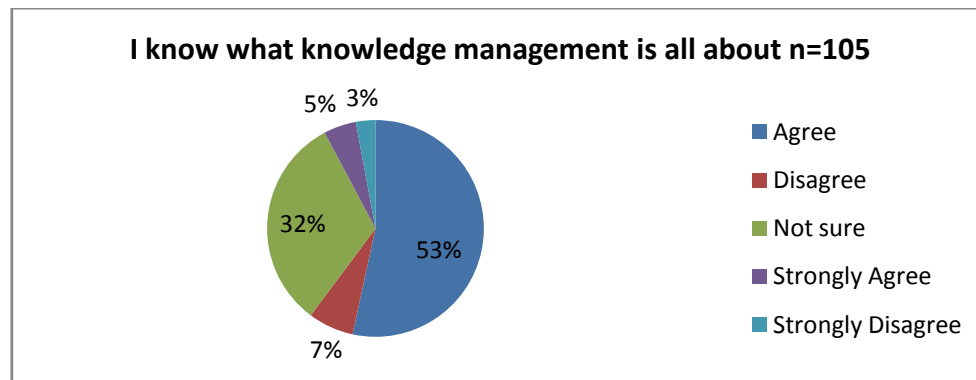


Figure 30 shows that 57% (60) of the respondents understand what KM is all about, while 32% (33) are not sure and 10% (10) do not know what Knowledge Management is about.

4.3 CONCLUSION

The chapter analysed the findings of the study. It clearly outlined how PCMS is used as the KM initiative; it lists the factors that are contributing to the challenge in LOD and the views of the respondents on PCMS as a KM initiative. The next chapter will interpret the results, draw conclusions and make recommendations.

CHAPTER 5

SUMMARY OF FINDINGS AND RECOMMENDATIONS

5.1 Introduction

This chapter deals with the summary of the findings of the study, links it to the literature review and also provides recommendations. The main focus is on how PCMS is used as the KM initiative and the critical factors that facilitate or limit the success of PCMS as the KM initiative in LOD.

5.2 Findings of the study

5.2.1 KM and training

The result of the biographical data in relation to PCMS training reveals that 88% of the respondents had attended PCMS training; only 27% of those who attended believe that the training offered is sufficient to operate the system. Alipour, Idris and Karimi (2011) assert that training is one of the critical factors to facilitate the culture of knowledge creation and sharing; it is the role of the managers in the organization to design suitable training. Chong and Choi (2005) further indicate that change requires people to develop new skills, knowledge and attitudes. This means that although training is fundamental in attaining new skills, training alone does not guarantee optimal use of PCMS. It has to be incorporated with other strategies like changing the employees' attitudes towards PCMS. It is imperative to know that if employees accept PCMS as a KM initiative, that they will utilise the skill attained through training to make optimal use of PCMS.

5.2.2 KM and change management

Data on PCMS usage reveals that of the 88% respondents who had attended PCMS training, more than half attended PCMS training more than once. The study further reveals that more than 60% of those who attended PCMS training had never used

PCMS. It is only 34% who use PCMS; only 4% of those users utilise PCMS optimally. The study also reveals that the highest percentage of users, 73%, is from the Committees Section. The Committees Section's increased usage is also confirmed by actual statistical data collected from PCMS usage statistics. In the interview with the Manager of the Document Section, the manager indicated that the high usage by the Committee Section is due to the section hiring a Change Manager in 2012, to assist with improving the section's PCMS use.

5.2.3 *KM and user acceptance*

Although the study reveals that sixty percent of the respondents understand why PCMS was implemented, sixty percent of the respondents are either neutral or disagree with the statement that the use of PCMS increases knowledge sharing, retention and also provide instant access to information in the division. The study further reveals that 78% of the respondents feel that PCMS does not add value to their work. The percentage of those who do not believe in PCMS is quite high. The division has to do a lot more to ensure that PCMS achieves its intended objectives. Cong and Pandya (2003:31) assert that it is important to raise an awareness of the benefits that come with the use of KM initiatives. BenMoussa (2009) adds that management has to communicate the benefits of KM initiatives to the end-user because lack of communication from management can lead to the failure of KM initiatives.

The study reveals that less than a quarter of the respondents believe that PCMS is user friendly. Ahn, Park and Jung (2009) and Boateng (2013) assert that KM systems should be user friendly. Ajmal (2009) adds that successful implementation of KM is also dependant on the level of user acceptance. The majority of the respondents have not yet accepted PCMS. One of the respondents even made a note on the questionnaire relating to PCMS being cumbersome. This area needs attention if PCMS usage is to be increased.

5.2.4. KM and organisational culture

Literature reveals that various scholars have identified the organizational culture as the biggest propelling or hindrance factor to the success of KM initiatives. The study reveals that only 22% of the respondents feel that there is a culture of knowledge sharing in the division. This percentage is far too low for PCMS to succeed as a KM initiative in the division. In general, cultural change links up with all other strategies previously discussed in order for KM initiatives to succeed. It is therefore important for LOD to make an effort to change the organizational culture to suit the desired change. Alavi and Leidner (2001) postulate that in a survey they undertook of KM initiatives, the majority of successful initiatives were based on an appropriate organizational culture that was conducive to the collection and sharing of knowledge among the members within the organization. BenMoussa (2009:903) makes a reference to an Ernst & Young survey conducted of 431 US and European organizations. The survey found that the biggest reported difficulties for KM initiatives were “changing people's behaviour”, and the existence of an inappropriate “organizational culture”. Alipour, Idris, and Karimi (2011) further stipulate that it is the role of managers to create an organizational culture that encourages individuals and groups to share their ideas and knowledge, and to help organization members to adopt the assumption that collective ideas are better than those held in private.

5.2.5. KM and leadership

The research also reveals that employees are not encouraged to share their knowledge in the division. It is only 30% of the respondents who feel that employees are encouraged to share their knowledge, while the majority are either silent or disagree with the issue. Hassan and AL-Hakimthe (2011) assert that for KM implementation to be successful - the motivation of employees to create, share and apply knowledge is the key. This is also supported by Cong and Pandya (2003:30) who assert that “the success of KM initiatives depend upon people's motivation, their willingness, and their ability to share knowledge and use the knowledge of others”.

The absence of motivation is also being perpetuated by the non-existence of a reward system for knowledge sharing and use, in the division. The study reveals that

less than twenty percent of the respondents believe that knowledge sharing is being rewarded. The very low percentage is indicative of an area that requires more attention. BenMoussa (2009: 904) asserts that as much as there is an agreement in the literature about the critical role of technology in KM, “many studies suggest that the biggest hurdle to knowledge management is not implementing cutting-edge IS solutions but motivating people to contribute to the KM effort and sharing their know-how”. This is further supported by Yao, Kam and Chan (2007) who indicates that KM deployment in the public sector lags behind because there is no motivation or reward for employees in this sector to share their knowledge. Cong and Pandya (2003) point out that for an organization to be able to motivate employees, it is also important to establish a formal reward and recognition system for knowledge sharing. This means that when employees are motivated, knowledge sharing happens without hassles as their hearts are in the process.

Literature clearly underscore that support from management is critical for KM initiatives to succeed. Gichoya (2005) indicates that top management’s role involves managing the changes. It is also important to note that change management and cultural factors are closely linked; they are both key issues related to change resistance and they also deal extensively with the people factors. Less than a quarter of the respondents felt that managers are doing enough, while more than two quarters of the respondents chose to be silent. The fact that the biggest percentage of respondents decided to remain silent on the issue, signifies that the issue is serious. When leadership is not visibly leading the KM initiatives, then the initiatives fail.

5.3 Recommendations

- Support from top management and middle management is critical for KM initiatives to succeed. BenMoussa (2009) asserts that KM should not be forced onto the employees - it has to be something that users feel they have to do. Management should market the value proposition of KM systems to employees, so that they are able to see the benefits of the systems. It is recommended that the leadership of the division should develop a strategy to

sell PCMS to the end users. This will work well if the position of KM manager is filled. If the post is filled, the KM manager will champion all the necessary KM processes.

- Managers must lead by example. Starting from the Divisional Manager, it is recommended that managers ensure that all day-to-day activities are incorporated into PCMS.
- To utilise PCMS optimally, it is fundamental that training be incorporated with change management. Lukas & Ogilvie (2006) assert that one major personal barrier to KM is user acceptance. It is recommended that LOD employ a change manager. The Change Manager will aid the division with culture change and assist in inculcating a culture that is conducive to knowledge sharing.
- Singh and Kant (2008) state that if employees are motivated either intrinsically or extrinsically, they are able to share knowledge more easily. It is recommended that LOD develop a reward strategy, in order to reward employees for knowledge sharing.
- Parliament also needs to measure the Return on investment of PCMS as it will assist in identifying whether it must continue to fund PCMS or invest in another system.

5.4 Conclusion

The study findings have revealed a lot of similarities to the reviewed literature in Chapter 2. The literature revealed that the success of KM initiatives hinge on the management's commitment to the whole process. It starts from the planning of the KM initiatives to the implementation process, observing all critical elements that propel or hinder the implementation of KM initiatives in all processes. This requires strategies from management to change the mind-set of LOD employees with regard to the usage of PCMS.

Although the situation looks dire, there is huge potential for improvement. This is especially true for the majority of the respondents understand KM as a concept, as well as the reason for the introduction of PCMS. The change management initiated

in the Committee Section and the subsequent improvement - is an indication that the KM issues need leaders to steer the process and provide strategies to ensure that the KM initiatives work. PCMS usage is generally very poor in the whole division and hence there is a need to motivate employees to utilise it.

REFERENCES

- Abass, F., Hayat, M., Shahzad, A. and Riaz, A. (2011) Analysis of Knowledge Management in the Public Sector of Pakistan. *European Journal of Social Sciences*, 19(4), 471-478.
- Ahn, Y., Park, S. and Jung, J (2009) A Case Study on Knowledge Management of Busan Metropolitan City *Advances in Developing Human Resources*, 11 (3), 388-398.
- Ajmal, M. (2009). Critical factors for successful KM initiatives in Project Background. *Communications of the IBIMA*, 8 (2009), 1-8.
- Ajmal, M., Helo, P. & Kekäle, T. (2010). Critical factors for knowledge management in project business. *Journal of Knowledge Management*, 14(1), 156-168.
- Al-Adaileh, R. M. & Al-Atawi, M. S. (2011). Organizational culture impact on knowledge exchange: Saudi Telecom context. *Journal of Knowledge Management*, 15, 212-230.
- Alalwan, J.A., (2013). A taxonomy for decision support capabilities of enterprise content management systems. *Journal of High Technology Management Research*, 24 (2013), 10–17.
- Alavi, M. and Leidner, D.E. (2001). Knowledge management and knowledge management systems: conceptual foundations and research issues, *MIS Quarterly*, 25 (1), 107-36.
- AL-Hakim, L. A. Y. and Hassan, S. (2011). The Relationships among Critical success factors of Knowledge Management, Innovation and Organizational Performance: A Conceptual Framework. *International Conference on Management and Artificial Intelligence*, 6 (2011), 94-103, Retrieved September 20, 2013 from <http://www.ipedr.com/vol6/19-A10010.pdf>
- AL-Hakim, L. A. Y. and Hassan, S. (2012). Critical Success Factors of Knowledge Management, Innovation and Organizational Performance: An Empirical Study of the Iraqi Mobile Telecommunication Sector. *Journal of Economics, Finance and Management Sciences*, 4 (1), 31-49.
- Al-Hawamdeh, S. (2002). Knowledge management: re-thinking information management and facing the challenge of managing tacit knowledge." *Information Research*, 8(1). Retrieved February, 2013 from <http://www.informationr.net/ir/8-1/paper143.html>
- Alipour, F. Idris, K. Karimi, R. (2011). Knowledge Creation and Transfer: Role of Learning Organization. *International Journal of Business Administration*, 2 (3), 61-67.
- Ansari, M., Youshanlouei, H.R. and Mood, M.M. (2012). A Conceptual Model for Success in Implementing Knowledge Management: A Case Study in Tehran Municipality. *Journal of Service Science and Management*, 5, 212-222.

Asoh, D., Belardo, S. and Neilson, R. (2002). Knowledge management: issues, challenges and opportunities for government in the new economy. *HICSS-Proceedings of the 100 35th Annual Hawaii International Conference on System Sciences*, 1745-1754.

Babbie, E. & Mouton, J., (2006). *The practice of social research*. Cape Town: Oxford University Press Southern Africa.

Babbie, E. (2008). *The Basics of Social Research*. 4nd ed. Thomson Wadsworth: Spain.

Baruch, Y. and Holtom, B. 2008. *Survey response rate levels and trends in organizational*

Baxter, P. and Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544-559.

Bell, T., Shegda, K.M., Gilbert M.R., and Chin, K. (2010). *Magic Quadrant for Enterprise Content Management*. Retrieved May 10, 2013, from <http://www.adobe.com/content/dam/Adobe/en/enterprise/pdfs/magic-quadrant-for-enterprise-content-management.pdf>

Bell, T., Shegda, K.M., Gilbert M.R., and Chin, K. (2011). *Magic Quadrant for Enterprise Content Management*. Retrieved May 10, 2013, from <http://www.documbase.com/Gartner-ECM-Magic-Quadrant-2011.pdf>

BenMoussa, C. 2009. Barriers to knowledge management - A theoretical framework. *World Academy of Science, Engineering and Technology*, 54: 906-917.

Boateng, W. (2013). A Sociological Overview of Knowledge Management in Macro Level Health Care Decision-Making. *Journal of Sociological Research*, 4(2) 135-146.

Borousan, E. Hajiabolhasani, A and Hojabri, R. (2012). *Evaluating factors that cause problem in implementation of knowledge management in Iran's oil and gas industry*. *African Journal of Business Management*, .6 (34), 9589-9596.

Botchkarev ,A. and Andru, P. (2011). A Return on Investment as a Metric for Evaluating Information Systems: Taxonomy and Application. *Interdisciplinary Journal of Information, Knowledge and Management* 6, 245-269.

Brevis T., Vrba M.J. and de Klerk, A. (1997). *Management principles, A Contemporary Edition for Africa*. 2nd edition, South Africa: Juta.

Burger, N.M. (2010). *Knowledge Management*. Unpublished academic notes. Cape Town: Stellenbosch University.

Chawla, D and Joshi, H. (2011). A Comparative Study of Knowledge Management Assessment in Business Excellence Awarded and Non-awarded Organizations in India. *Global Business Review*, 12 (2), 279 –295.

Chawla, D and Joshi, H. (2011). Knowledge management practices in Indian industries – a comparative study. *Journal of Knowledge Management*, 14 (5), 708 – 725.

Choi, Y.S. (2000). *An empirical study of factors affecting successful implementation of knowledge management*. Unpublished academic dissertation. University of Nebraska.

Chong, C.W., Chong, S.C. and Wong, K.Y. (2007). Implementation of KM strategies in the Malaysian telecommunication industry: An empirical analysis. *The journal of information and knowledge management system*, 37(4), 452-470.

Chong, C.W., Holden, T., Wilhelmij, P., and Schmidt, R. A. (2000).Where does knowledge management add value? *Journal of Intellectual Capital*, 1, (4), 366-380.

Chong, S. C. (2006). KM critical success factors: A comparison of perceived importance versus implementation in Malaysian ICT companies. *The Learning Organization*, 13(3), 230-256.

Chong, S.C. (2005). Implementation of knowledge management among Malaysian ICT companies: An empirical study of success factors and organizational performance. Unpublished academic dissertation. Multimedia University, Malaysia.

Chong, S.C. and Choi, Y.S. (2005). Critical Factors in the Successful Implementation of Knowledge Management. *Journal of Knowledge Management Practice*. Retrieved October 17, 2011, from <http://www.tlainc.com/article90.htm>

Choy,C.S. (2006). Criteria for measuring KM performance outcomes in organizations. *Knowledge Management Conference & Exhibition (KMICE)*. 123-131.

Chua, A., Lam, W. (2005). Why KM projects fail: a multi-case analysis, *Journal of Knowledge Management*, 9(3), 6-17.

CIO Council, (2001). *Managing Knowledge @ Work. An Overview of Knowledge Management*: Knowledge Management Working Group of the Federal Chief Information Officers Council. Retrieved May 5, 2011, from http://www.providersedge.com/docs/km_articles/KM_at_Work.pdf

Clinical Tools, (2006). *Guidelines for Responsible Data Management in Scientific Research*. US Department of Health and Human Services; Office of Research Integrity. Retrieved February 19, 2014 from <http://ori.hhs.gov/education/products/clinicaltools/data.pdf>

Cohen, L. Manion, L. and Morrison, K. (2007). *Research Methods in Education*. 6th Edition. New York: Routledge Falmer.

Cong, X. and Pandya, K.V. (2003). Issues of Knowledge Management in the Public Sector. *Electronic Journal of Knowledge Management*, 1 (2), 25-33.

Creswell, J.W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd Edition. Los Angeles: Sage Publications, Inc.

Daud, S. and Yusoff, W.F.W. (2010). Knowledge management and firm performance in smes: the role of social capital as a mediating variable. *Asian Academy of Management*, 15 (2), 135–155.

Daud, S., & Yusuf, W. F. W. (2008). An Empirical Study of Knowledge Management Processes in Small and Medium Enterprises Paper presented at the IBIMA *Communications of the IBIMA*, 4. Retrieved August 10, 2011 from <http://www.ibimapublishing.com/journals/CIBIMA/volume4/v4n22.pdf>

Davenport, T.H. (1996). Some Principles of Knowledge Management. *Strategy-business*, 2. Retrieved January 30, 2013 from <http://www.strategy-business.com/article/8776?gko=f91a7>

De Brun, C. (2005). *ABC of Knowledge Management*. UK National Health System (NHS). Retrieved January 2, 2012 from http://www.idrc.ca/uploads/user-S/11479492851ABC_of_KM.pdf

De Tienne, K.B., Gibb, D., Hoopes, C. and Harries, S. (2004). Towards a model of effective Knowledge Management and Direction for future research: Culture, Leadership, and CKOs. *Journal of leadership and organizational studies*, 10(4), 26- 43.

De Vos, A.S. (1998). *Research at Grassroots: A primer for the Caring Professions*. Pretoria: Van Schaik.

De Vos, A.S., Strydom H., Fouche, C.B., and Delport, C.S.L. (2002). *Research at Grassroots: For the social sciences and human service professions* 2nd edition. Pretoria: Van Schaik.

De Vos, Strydom, Fouche and Delport, A.S. (2011). *Research at Grassroots: For the social sciences and human service professions* 4th edition. Pretoria: Van Schaik.

Deloitte (2011). Leadership by design – An architecture to build leadership in organizations. Deloitte Development LLC (2011) Retrieved February 19, 2014 from http://www.deloitte.com/assets/Dcom-Australia/Local%20Assets/Documents/Industries/Financial%20services/Banking%20and%20Securities/us_talent_LeadershipbyDesign_031711.pdf

- Dove, R. (1999). Knowledge management, response ability, and the agile enterprise. *Journal of knowledge management*, 3(1), 18-35.
- Du Plessis, M. (2005). Drivers of knowledge management in the corporate environment. *International journal of information management*, 25(3), 193-202.
- Du Plessis, M. (2007). Knowledge management: what makes complex implementations successful? *Journal of Knowledge Management*, 11(2), 91-101, 2007.
- Du Plessis, P.J. Jooste, C.J and Strydom, J.W. (2005). Applied Strategic Marketing. 2nd edition. Sandton : Heinemann Publishers (Pty) Ltd.
- Edwards, J. A. (2011). Process View of Knowledge Management: It Ain't What you do, it's the way That you do it. *The Electronic Journal of Knowledge Management* , 9(4) , 297-306.
- Esterhuizen, D., Schutte, C. & Du Toit, A. (2012). A knowledge management framework to grow innovation capability maturity', *SA Journal of Information Management* 14(1), 1-10.
- Frické, M. (2009). The knowledge Pyramid: A critique of the DIKW Hierarchy. *Journal of Information Science*, 35(2), 131-142.
- Gichoya, D. (2005). Factors Affecting the Successful Implementation of ICT Projects in Government. *The Electronic Journal of e-Government*, 3 (4), 175 – 184.
- Gillingham, H and Roberts, B, (2006).Implementing Knowledge Management: A Practical Approach. *Journal of Knowledge Management Practice*,7(1), Retrieved June 05, 2011 from <http://www.tlinc.com/articl107.htm>
- Globalscape (2006). *Content Management System Buyer's Guide A comprehensive guide to buying a CMS—what to look for, and what to expect*. Retrieved July 20, 2012 from <http://www.globalscape.com/files/globalscape cms new buyers guide.pdf>
- Groenewald, T. (2003). *The role of people in knowledge management and corporate intelligence*. South Africa: Technicon SA. Retrieved October 11, 2011 from: <http://www.saoug.org.za/archive/2003/0313aa.pdf>
- Hackos, J. (2002). *Content management for dynamic web delivery*. New York: Wiley
- Hansen, M. T., Nohria, N. and Tierney, T. (1999). What's Your Strategy for Managing Knowledge? *Harvard Business Review* 77, (2), 106–116.
- Harrell, M.C. and Bradley, M. A. (2009). *Data Collection Methods Semi-Structured Interviews and Focus Groups*. Santa Monica: Rand Corporation.

Haslinda, A., & Sarinah, A. (2009). A Review of Knowledge Management Models. *The Journal of International Social Research*, 2(9), 187-198.

Hester, A. J. (2011). A Comparative Analysis of the Usage and Infusion of Wiki and Non-Wiki-Based Knowledge Management Systems. Special Issue: New Theories and Methods for Technology Adoption Research. *Information Technology and Management*, 12(4), 335-355.

Heywood, A. 1997. *Politics*. Palgrave Macmillan. New York.

Hitchcock, G. and Hughes, D. (1995). *Research and the Teacher: A Qualitative Introduction to School-based Research*. 2nd Edition. London: Routledge.

Holsapple, C. and Joshi, K. (1999). Description and Analysis of Existing Knowledge Management Frameworks. In *Proceedings of the 32nd Hawaii International Conference on System Sciences*.

Holsapple, C.W. and Joshi, K.D. (2002) Knowledge manipulation activities: results of a Delphi study. *Information & Management*, 39. 477-490.

Holsapple, C.W. and Joshi, K.D. (2002). Knowledge Management: A Threefold Framework. *The Information Society: An International Journal*, 18(1), 47-64.

Hussey, J. and Hussey, R. (1997). *Business Research: A Practical Guide for Undergraduate and Postgraduate Studies*. London: McMillan Press Ltd.

Hwang, A.S. (2003). Training strategies in the management of knowledge. *Journal of Knowledge Management*, 7(3), 92 – 104.

Jafari, M., Akhavan, P and Mortezaei, A. (2009). A Review on Knowledge Management Discipline. *Journal of Knowledge Management Practice*, 10, (1). Retrieved October 20, 2013 from <http://ssrn.com/abstract=2189715>

Johnson, R.B. and Onwuegbuzie, A.J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14–26.

Karemente, K. Aduwo, J.R., Mugejjera, E. and Lubega, J. (2009). Knowledge Management Frameworks: A Review of Conceptual Foundations and a KMF for IT-based Organizations. *Strengthening the Role of ICT in Development*, 35. Retrieved October 2, 2012 from http://cit.mak.ac.ug/iccir/downloads/ICCIR_09/Kyoratungye%20Karemente,%20Jennifer%20ORose%20Aduwo,%20Emmanuel%20Mugejjera%20and%20Jude%20Lubega_09.pdf

Katuu, S. (2012) Enterprise content management (ECM) implementation .*South Africa Records Management Journal*, 22 (1), 37-56

Khan, U.I., Usoro, A. And Majewski, G. (2010). An Organizational Culture Model for Comparative Studies: A Conceptual View. *International Journal of Global Business*, 3 (1), 53-82.

Knoco (2012). *Return on Investment for Knowledge Management*. Retrieved October 12, 2014 from <http://www.knoco.com/Knoco%20newsletter%20october%202012.pdf>

Kok, J.A. (2004). Framework for managing knowledge in an enterprise to gain competitive advantage. *South African Journal of Information Management* 6(4) Retrieved May 12, 2011 from <http://www.sajim.co.za/index.php/SAJIM/article/view/351/341>

Kotter, J.P. (2001). *What Leaders Really Do*. Harvard Business School Publishing Corporation.

Laudon, K.C and Laudon, J.P. (2004). *Management Information Systems: Managing the digital firm*. 9th edition. New Jersey: Pearson Education, Inc.

Leidner, D., Alavi, M. and Kayworth, T. (2006). The role of culture in Knowledge Management: A Case Study of Two Global Firms. *International Journal of e-Collaboration*, 2(1), 17-40.

Lin , C., Wu, J. C., Yen, D. C. (2012). Exploring barriers to knowledge flow at different knowledge management maturity stages. *Information & Management* , 49, 10 – 23.

Lok, D.F. (2008). *Electronic Measurement of collaboration health within a central electronic knowledge platform*. Unpublished Master's thesis, South Africa: University of Witwatersrand.

Lukas, L.M. and Ogilvie, D.T. (2006) "Things are not always what they seem: How reputations, culture and incentives influence knowledge transfer", *The Learning Organization*, 13 (1), 7–24.

Maier, R. and Remus, U. (2003). Implementing Process-oriented Knowledge Management strategies. *Journal of Knowledge Management*, 7(4), 62-74.

McGinnis, T.C. and Huang, Z. (2007). Rethinking ERP success: A new perspective from knowledge management and continuous improvement. *Information & Management*, 7 (44), 629-634.

McKinsey (2002). The seven S model. Retrieved October 10, 2011 from <http://www.thesevensmodel.com>

McManus, D.J. & Snyder, C.A. (2003) Organization Value of Knowledge Management, *Information Resources Management Association. International Conference Proceedings*, May, 2003.

McMillan, J H. & Schumacher, S. (2006). *Research in Education: Evidence-Based Enquiry*. 6th Edition. Boston: Library of Congress in Publication Data.

Moballeghi, M . and Moghaddam G.G. (2011). Knowledge Management and Measuring its impact on Organisational Performance. *International Conference on Financial Management and Economics IPEDR* (11), IACSIT Press, Singapore.

Moshari, J. (2013). Knowledge Management Issues in Malaysian Organizations: the Perceptions of Leaders. *Journal of Knowledge Management, Economics and Information Technology* III (5).

Neuman, W.L. (2011). *Social Research Methods Qualitative and Quantitative Approaches*. 6th Edition. Cape Town: Pearson Education, Inc.

Park, H., Ribiere, V., & Schulte, W. D. (2004). Critical attributes of organizational culture that promote knowledge management technology implementation success. *Journal of Knowledge Management*, 8(3), 106-117.

Pawlowski, J.M., Bick, M. (2012): The Global Knowledge Management Framework: Towards a Theory for Knowledge Management in Globally Distributed Settings, *Electronic Journal of Knowledge Management*, 10(1), 92-108.

Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: The Free Press.

Porter, M. F. (1996). What is strategy? *Havard Business Review* (November-December):61-80.

Pryor, M.G., Taneja, S., Humphreys, J., Anderson, D. and Singleton, L. (2008). Challenges facing Change Management Theories and Research. *Delhi Business Review*, 9(1), 1-20.

Republic of South Africa (2009). *Functional Specification for Parliament Content Management System*. Parliament of the Republic of South Africa. Cape Town.

Republic of South Africa (2009). *Parliament ICT Strategy (MSP) 2009- 2014*. Parliament of the Republic of South Africa. Cape Town.

Republic of South Africa (2010). *DPSA Knowledge Management Framework for the Public Service: Second Draft*. Department of Public Service and Administration.

Republic of South Africa (2006). *Project Charter*. Parliament of the Republic of South Africa. Cape Town.

Republic of South Africa, (2009). *Strategic intent for Parliament Policy Imperative 2009-2014*. Parliament of the Republic of South Africa. Cape Town.

Republic of South Africa. (1997). Batho Pele - "People First" *White Paper on Transforming Public Service Delivery*. Department of Public Service and Administration Retrieved October 16, 2011 from http://www.polity.org.za/polity/govdocs/white_papers/transform.html

Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, 9(3), 18-35.

Rifat O. Shannak, R.O., Masa'deh, R.M. and Akour, M. Knowledge Management Strategy Building: Literature Review. *European Scientific Journal*, 8(15), 143-168.

Rumizen, M.C. (2002). *The Complete Idiot's Guide to Knowledge Management*. Madison, WI: John A. Woods, CWL Publishing Enterprise.

Saade, R. Nebebe, F, and Mak, T. (2011). Knowledge Management Systems Development: Theory and Practice. *Interdisciplinary Journal of Information, Knowledge, and Management*, (6). Retrieved January 10, 2012 from <http://www.ijikm.org/Volume6/IJIKMv6p035-072Saade472>.

Saunders, M., Lewis, P. and Thornhill, A. (2003). *Research Methods for Business Students. 3rd Edition*. New York: Pearson Education Limited.

Schell, C (1992). *The value of the Case Study as a Research Strategy*. Retrieved October 10, 2011 from <http://finance-mba.com/Case%20Method.pdf>

Schwartz, D.G. , Divitini, M. and Brasethvik, T. (2000). *Internet-based organizational Memory and Knowledge Management*. Idea Group Publishing. United States of America.

Singh, M. D. and Kant, R. (2008). Knowledge management barriers: An interpretive structural modelling approach. *International Journal of Management Science and Engineering Management*, 3(2), 141-150.

Sisulu, M. (2013). The Evolving Role of Parliament in Governance and Accountability. In Plaatjes, D.(ed). *Protecting the Inheritance: Governance & Public Accountability in Democratic South Africa*. Jacana Media (Pty) Ltd ,Johannesburg: 25-35.

Skyrme D.J. (1995). *Developing A Knowledge Strategy*. Retrieved August 01, 2011 from <http://www.skyrme.com/pubs/knwstrt.htm>

Skyrme, D. and Amidon, D. (1997). The Knowledge Agenda. *Journal of Knowledge Management*, 1(1) 27-37.

Smith, P.A.C. (2004). Knowledge Management: People Are Important! *Journal of Knowledge Management Practice*. Retrieved August 3, 2013 from <http://www.tlainc.com/articl60.htm>

Soy, S. K. (1997). *The case study as a research method*. Unpublished paper, University of Texas at Austin. Retrieved October 11, 2011 from <http://www.gslis.utexas.edu/~ssoy/usesusers/l391d1b.htm>

Storey, J., Barnett, E. (2000). Knowledge Management Initiatives: Learning From Failure. *Journal of Knowledge Management*, 4(2), 145-156.

Sukumaran, S and Hsu-Kim, O (2006). *Organization Support Framework for Knowledge Elicitation*. UCTI Working Paper WP-06-03. Retrieved September 08, 2012 from <http://www.ucti.edu.my/wps/issue1/wp-06-03-paper.pdf>

Sunassee, N.N. and Sewry, D.A. (2003). *An Investigation of Knowledge Management Implementation Strategies*. SAICSIT proceedings. Rhodes University.

Syed-Ikhsan, S.O.S., and Rowland, F. 2004 Benchmarking knowledge management in a public organization in Malaysia. *Benchmarking: An International Journal*, 11 (3), 238 - 266.

Terre Blanche M., Durrheim, K. and Painter, D. (2006). *Research in Practice*. Cape Town: University of Cape Town Press.

Tom,B. and Ciaran, M. (2007). *Implementing Knowledge Management Systems in Public Sector Organizations: A Case Study of Critical Success Factors*. ECIS 2007 Proceedings. Paper 112. Retrieved September 05, 2012 from <http://is2.lse.ac.uk/asp/aspecis/20070021.pdf>

Uriarte, F. A. J. (2008). *Introduction to knowledge management*. Jakarta, ASEAN Foundation.

Walker, D. H. T., Maqsood, T., Grisham, T. and Srinivasan, P., (2006). *Frameworks For Knowledge Management Initiatives In The Field Of Project Management-Using Metaphor for Improved Visibility* Joint International Conference on Construction Culture, Innovation, and Management (CCIM) Dubai, November 26th -29th 2006 Retrieved October 2, 2012 from http://www.thomasgrisham.com/attachments/File/CIB_Dubai_Knowledge_Management.pdf

Welman C, Kruger, F and Mitchell, B. (2005). *Research methodology. 3rd Edition*. Cape Town: Oxford University Press.

White, M. (2004). *The Content Management Handbook*. London: Facet Publishing

Wiig, K. (2002). Knowledge management in public administration. *Journal of Knowledge Management*, 6 (3), 224-239.

Wiig, K. M. (1997). Knowledge Management: an introduction and perspective. *Journal of Knowledge Management*, 1(1), 6-14.

Wiig, K. M. (1999). *The Intelligent Enterprise and Knowledge Management*. Retrieved June 15, 2013 from http://www.krii.com/downloads/intellig_enterprise%20&%20km.pdf

Wiig, K., (1999). What Future Knowledge Management Users May Expect. *Journal of Knowledge Management*, 3(2), 155-165.

Wiig, K.M. (1997). Knowledge management: an introduction and perspective. *Journal of Knowledge Management*, 1 (1), 6-14.

Winstanely, C. (2009). *Writing a dissertation: For Dummies*. UK: John Wiley & Sons Ltd.

Wong K. Y. (2005) Critical success factors for implementing knowledge management in small and medium enterprises. *Industrial Management & Data Systems*, 105 (3), 261-279.

Wong, K.Y. and Aspinwall, E. (2004) Knowledge Management Implementation Frameworks: A Review. *Knowledge and Process Management*, 11 (2), 93-104.

Xue, J. and Yahya, A. (2012). Critical analysis of ECM applications in the clouds: A case study. *International Journal of Computer Science & Information Technology*, 4(3), 101-112.

Yao, L.J., Kam, T.H.Y. and Chan, S.H. (2007). Knowledge sharing in Asian public administration sector: the case of Hong Kong. *Journal of Enterprise Information Management*, 20(1), 51-69.

Yuen, Y.H. (2007). *Overview of Knowledge Management in the Public Sector*. 7th Global Forum on Reinventing Government: Building Trust in Government Workshop on Managing Knowledge to Build Trust in Government. Retrieved May 10, 2013 from <http://unpan1.un.org/intradoc/groups/public/documents/unpan/unpan026041.pdf>

Yu-Yuan Hung, R., Ya-Hui Lien, B. and McLean, G.N. (2009). Knowledge Management Initiatives, Organizational Process Alignment. Social Capital, and Dynamic Capabilities. *Advances in Developing Human Resources* 11(3), 320-333.

Zack M.H. (1999). Developing a Knowledge Strategy. *Carlifonia Management Review*. 41(3). Retrieved October 11, 2011 from <http://web.cba.neu.edu/mzack/articles/kstr>

http://www.parliament.gov.za/live/content.php?Item_ID=95

http://www.providersedge.com/docs/presentations/KM_Offerings_and_Lessons_Learnt_During_Their_Implementation.pdf

APPENDICES

Appendix A : Letter to the Secretary to Parliament



PARLIAMENT
OF THE REPUBLIC OF SOUTH AFRICA

Memorandum

To: Secretary to Parliament of South Africa

From: Mrs AP Sinyegwe

Language Practitioner: Interpreting Unit

Date: 18 September 2012

Request for Permission to Conduct Research on Knowledge Management and Parliament Content Management System.

PURPOSE

Request to be granted permission by The Secretary to Parliament to conduct research on the topic '**Knowledge Management and Parliament Content Management System.**'

BACKGROUND

Sinyegwe Azwinndini is a Tshivenda language practitioner who is currently studying towards the completion of her Master's degree at Wits University in the Faculty of Commerce, Law & Management. As part of the programme's requirements, she has to do a mini-research on the topic of her choice. Her research topic is "**Knowledge Management and Parliament Content Management System**"

MOTIVATION

The study aims at contributing towards understanding the importance of knowledge management in the public sector. The study will assist the Legislative and Oversight Division to identify factors that are contributing towards the ineffective use of PCMS as a knowledge management initiative, and also help to understand the overall benefits of using this initiative.

The officer appreciates the attention given to this request and thanks the Secretary in anticipation.

Signature

Date:

Recommended/ not recommended

MH Tshabalala

Date:

Section Manager

Recommended/ not recommended

N Keswa

Date:

Approved/ not approved

M Coetzee

Date:

Acting Secretary to Parliament

Appendix B: Letter to the Respondents

Student: Sinyegwe Azwinndini Phillys, Public Education Office, 90 Plein Street,
Cape Town, 8000

Tel: 021 403 8082 Cell: 082 4847 628. E-mail: asinyegwe@parliament.gov.za

Dear Colleagues

My name is Sinyegwe Azwinndini Phillys and I am a Public Education Practitioner in the Public Education Office of the Parliamentary Communication Service. I am requesting permission from the Unit to hand-out questionnaires to employees. I am currently doing my Master's of Management (Public and Development Management) degree at WITS University. My research topic is Knowledge Management and Parliament Content Management System (PCMS). Knowledge has become a critical tool to sustain growth in any organization. Both private and public organizations are aware of the value that knowledge management holds for organizations to be competitive and that even when hiring employees they tend to focus on the "brains" rather than "hands".

I am conducting research in the Legislative and Oversight Division. The research will involve 170 participants. Permission to conduct the study has been granted by the Secretary to Parliament. Participation will be through a questionnaire. The time to finish the questionnaire is approximately 15 minutes.

Aim of the study

The study contributes towards the understanding of the importance of knowledge management in the Parliament of the Republic of South Africa. The study will assist the Legislative and Oversight Division to identify the factors that contribute towards effective or ineffective use of PCMS as a knowledge management initiative.

It must be noted that the researcher will adhere to the following principles:

- Participation in this research is voluntarily and you can withdraw anytime.
- The information provided will be treated with confidentiality and your participation will be anonymous.
- The researcher bears full responsibility for anything that can emanate from this research.

Should you decide to participate, please complete the consent form. Kindly note that all questionnaires will be collected by Monday the 27 May 2013.

Thank you

Sinyegwe Azwinndini Phillys

Student No: 512016

Consent

I agree to participate in the research on Knowledge Management and PCMS System as described in the accompanying letter

Name.....

Signature.....

Date.....

Appendix C: Survey Questionnaire

SURVEY QUESTIONNAIRE

Section A: Demographics

Please indicate with an X in the relevant box.

This part of the questionnaire focuses on the demographics of the participant.

1. Gender	
Male	
Female	
2. How long have you been in service with Parliament?	
Less than a year	
1-5 years	
6-10 years	
11 and more	
3. In which section are you located?	
Language Services Section	
Committee Section	
Information Services Section	
Leader of Government Business Section	

Section B: PCMS Training Attendance

This part focuses on attendance of PCMS training

4. Have you attended any PCMS training?	
Yes (if yes, answer questions 4 to 7)	
No (if no, answer questions 4 and 8)	
5. If Yes, How many times?	
Once	
Twice	

Three times	
6. How was the training conducted?	
Group	
One on one	
Both	
7. When did you last attend PCMS training?	
Before 2010	
2010	
2011	
2012	
2013	
8. If No, select the appropriate answer(s)	
I did not attend PCMS Training because	
1. I do not understand what PCMS is about	
2. We do not use PCMS in our team/unit/section	
3. My manager does not support the use of PCMS	

Section C: Use of PCMS

9. Do you have PCMS on your computer?	
Yes	
No	
10. Do you use PCMS?	
Yes	
No	
11. How often do you use PCMS?	
Daily when I do my tasks	
Weekly when I do my tasks	

Monthly when I do my tasks	
Occasionally when I do my tasks	
Never	

Section: D Intended Objectives of PCMS

This part focuses on whether PCMS is achieving its intended objectives

8. Intended Objectives of PCMS	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Use of PCMS increases knowledge sharing within the division.					
PCMS use increases knowledge retention in the division.					
PCMS provides instant access to relevant and useful information.					

Section E: Contributory factors

This part of questionnaire focuses on contributing factors to the use or not of PCMS

9. Contributory factors	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
I know and understand why PCMS was implemented.					
PCMS training offered is sufficient to operate the system.					
PCMS adds value to the manner in which I do my job.					
PCMS is the right technological tool to foster knowledge retention and use in LOD.					
PCMS is user friendly.					
LOD Management supports the use of PCMS.					
LOD management encourages Knowledge sharing.					

Knowledge sharing is rewarded.					
There is culture of knowledge sharing in the LOD.					
I know what Knowledge Management is all about.					

Appendix D: Pilot Study Questionnaire

SURVEY QUESTIONNAIRE

Please indicate with an X in the relevant box.

Section A: Demographics

This part of the questionnaire focuses on the demographics of the participant.

1. Gender	
Male	
Female	
2. How long have you been in the service of Parliament?	
Less than a year	
1-5 years	
6-10 years	
11 and more	
3. In which section are you located?	
Language Services Section	
Committee Section	
Information Services Section	
Leader of Government Business Section	

Section B: PCMS Training Attendance

This part focuses on the volume attendance of PCMS training

4. Have you attended any PCMS training?	
Yes (if yes, answer questions 4 to 7)	
No (if no, answer questions 4 and 8)	
5. If Yes How many times?	
Once	

Twice	
Three times	
6. How was the training conducted?	
Group	
One on one	
Both	
7. When did you last attend PCMS training?	
Before 2010	
2010	
2011	
2012	
2013	
8. If No , select the appropriate answer(s)	
I did not attend PCMS Training because	
I do not understand what PCMS is about	
We do not use PCMS in our team/unit/section	
My manager does not support the use of PCMS	

Section C: Use of PCMS

9. Do you use PCMS?	
Yes	
No	
10. How often do you use PCMS?	
Daily when I do my tasks	
Occasionally when I do my tasks	
Never	

Opinions about PCMS and Knowledge Management

	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Use of PCMS increases knowledge sharing within the division.					
PCMS use increases knowledge retention in the division.					
PCMS provides instant access to relevant and useful information.					
I know and understand why PCMS was implemented.					
PCMS training offered is sufficient to operate the system.					
PCMS adds value to the manner in which I do my job.					
PCMS is the right technological tool to foster knowledge retention and use in LOD.					
PCMS is user friendly.					
LOD Management supports the use of PCMS.					
LOD management encourages Knowledge sharing.					
Knowledge sharing is rewarded.					
There is culture of knowledge sharing in the LOD.					
I know what Knowledge Management is all about.					