KNOWLEDGE SHARING PRACTICES IN PUBLIC LIBRARIES: A CASE STUDY OF ETHEKWINI MUNICIPAL LIBRARIES (EML)

By

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DECLARATION

I, Judith Busisiwe Ngcobo, declare that:

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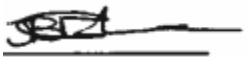
Signed  Date: 22 May 2020

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To everyone who wished me well, thank you!

DEDICATION

I hereby dedicate this study to:

My daughter, Sibusisekile Nontando Gumede, may you grow up to be anything you want to be and I hope that you turn out to be better than me. Mummy loves you.

LIST OF ACRONYMS AND ABBREVIATIONS

BTECH	Bachelor of Technology
CBD	Central Business District
COP	Community of Practice
DPSA	Department of Public Service and Administration
EML	eThekwini Municipal Libraries
INK	Inanda, Ntuzuma and KwaMashu area
KM	Knowledge Management
KMRG	Knowledge Management Reference Group
KS	Knowledge Sharing
KSC	Knowledge Sharing Capability Model
KZN	KwaZulu-Natal
ICTs	Information and Communication Technologies
IDP	Integrated Development Plan
IT	Information Technology
LAN	Local Area Network
LIS	Library and Information Science
MNC	Multinational Company
MILE	Municipal Institute of Learning
NDP	National Development Plan
NLSA	National Library of South Africa
PHRDF	Provincial Human Resource Development Forum
PhD	Doctoral Degree
SECI	Socialisation, Externalisation, Combination and Internalisation
SET	Social Exchange Theory
SNA	Social Network Analysis
SNT	Social Network Theory
SACN	South African Cities Network
SPSS	Statistical Package for Social Sciences
UKZN	University of KwaZulu-Natal
USA	United State of America

VIKS	Voluntary, Informal Knowledge Sharing

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ABSTRACT

In the information age, knowledge is predominantly seen as one of the most important assets in both private and public organisations and should therefore be managed carefully.
The aim of the study was to investigate the knowledge sharing practices in public libraries: a case study of eThekwini Municipal Libraries (EML). Knowledge management (KM) and knowledge sharing (KS) in public libraries has increasingly come into focus but very little literature is available on knowledge sharing in public libraries in the South African context. eThekwini Municipal has adopted a number of KM initiatives in order to improve the municipalities' service delivery and to meet its strategic vision. The study was guided by the following research questions: What was the extent of knowledge sharing at EML? What knowledge sharing practices were undertaken at EML? What was the attitude and perception of library staff towards knowledge sharing? What were the challenges facing the library staff with regards to knowledge sharing? What strategies could EML use to overcome such challenges.

The study was informed by the Socialisation, Externalisation, Combination and Internalisation (SECI) Model of knowledge creation, also known as the Knowledge Conversion Theory. This study was guided by the post-positivism paradigm and used the mixed methods research design, which included both qualitative and quantitative data collection methods. The targeted population consisted of 168 respondents. A census was used to collect data from professional library staff. Qualitative data was collected from district managers by means of face-to-face and telephonic semi-structured interviews and quantitative data was collected from the senior librarians, librarians and assistant librarians by means of self-administered questionnaires administered online via email. The computer software program Statistical Package for Social Sciences (SPSS) was used to analyse the quantitative data obtained from the set of closed questions in the questionnaire. Results of data analysis were presented in the form of tables, figures, charts, and verbal descriptions. Qualitative data was analysed using thematic analysis; qualitative data was organised and presented according to the research questions and involved the discussions of themes and categories.

The major findings were that library staff at EML had strong feelings that knowledge sharing with co-workers was a good practice. The findings also revealed that there are a number of problems associated with knowledge sharing at EML. There was consensus between interview

and questionnaire respondents that there was knowledge sharing challenges at EML. Such challenges were divided into individual and organisational factors. In line with these findings, respondents were asked to recommend strategies for improving knowledge sharing at EML. The top five recommendations made by respondents included top management support, organisational culture, organisational structure, Information Communication Technologies (ICTs), and a budget to support knowledge sharing projects.

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CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1 Introduction

According to Nazim and Mukherjee (2016), knowledge sharing is an integral part of knowledge management as it is through sharing that knowledge can be expanded throughout an organisation. Resnick (2002), stated that in this information age, knowledge is viewed as possibly the most essential asset requiring careful management within organisations. Msomi (2015) further says that KM is comparatively a new managerial practice, especially in South Africa. Academically, as a research topic and emerging discipline, KM has not entirely entered the public library literature. This is concerning, as the public libraries's main activity is the acquiring and sharing of knowledge.

Biranvand, Seif and Khasseh (2015), are of the opinion that public libraries are a part of the organisations which need knowledge sharing in their daily activities. Public libraries are expected to deliver quality information service to their library users; therefore, they need to establish KM elements. Henczel (2000), argues that knowledge sharing is one of the most effective ways library staff exchange knowledge, skills, and experience. KS is also a strategic approach managers use to reach a desirable level of knowledge among their staff. Biranvand et al. (2015), further says that as companions of knowledge sharing and dissemination, public libraries have a vital role in quantitatively and qualitatively improving knowledge sharing. Libraries are able to play their role as knowledge champions, when they provide a suitable context for knowledge sharing among their own library staff and, then offer services to other library users and organisations (Biranvand et al., 2015).

Considering the critical role of libraries in the process of sharing knowledge for various communities, the present research investigates the knowledge sharing practices in public libraries by completing a case study of eThekwini Municipal Libraries. In this chapter an introduction to this study is provided followed by the background to the study and the eThekwini Municipal Libraries. The problem statement is followed by definitions of key terms used in the study. The principal theories upon which the research project was constructed are presented. In view of the research problem, certain research objectives and research questions are identified. An indication of the significance of this study is followed by ethical considerations and limitations of the study. The chapter also gives an overview of the research

methodology and methods used in the study. An outline of dissertation chapters is highlighted before this chapter is summarised.

1.2 Background to the study

The broad aim of the study was to investigate the knowledge sharing practices in public libraries based on a case study of EML. Knowledge management and knowledge sharing in public libraries has increasingly come into focus but very little literature is available on knowledge sharing in public libraries in the South African context. eThekwini Municipal has adopted a number of KM initiatives in order to improve the municipalities' service delivery and to meet its strategic vision. Barraclough, Averweg and Spencer (2006), stated that KM became a strategic issue for eThekwini Municipal as early as 2005 with the realisation that a significant amount of knowledge was generated at the city-level but at the same time, knowledge was lost when people retired or left the City administration. The study aimed to explore if any of the initiatives have been effective in facilitating knowledge sharing in public libraries within the Municipal.

1.3 Background to eThekwini Municipal Libraries

eThekwini Municipal is located on the KwaZulu-Natal coast and serves an area of 2300 square kilometres. The Inanda, Ntuzuma and KwaMashu area (INK) is a Presidential Urban Renewal Project to the north of the Central Business District (CBD). Another major township, Umlazi, is located to the south of the CBD. eThekwini Municipal is a metropolitan municipal created in 2000 that includes the city of Durban and surrounding towns. eThekwini is one of the 11 districts of KwaZulu-Natal province of South Africa (eThekwini municipal, 2015). eThekwini Municipal was formed from seven formerly independent local councils and tribal lands. eThekwini Municipal is a Category 'A' municipal found in the South African province of KwaZulu-Natal (eThekwini Municipal, 2014). eThekwini Municipal Library was established in 1853 as the Durban Mechanics Institute for the intellectual improvement of its members and others and it is one of the oldest institutions in KwaZulu-Natal (eThekwini Municipal, 2015). EML aims to provide library services to cater for the educational, informational and recreational needs of the people of eThekwini. EML runs 95 branch libraries within the parameters of eThekwini and in the central substructures as well as the central lending, central reference, and Don Africana libraries in the city centre. Further services include, housebound service, Ulwazi Indigenous Knowledge Programme, Cyber zones, rural community libraries, digital doorways and departmental library services. The Umgeni road library serves as

headquarters for the departmental libraries, which runs the special libraries in the council departments; and technical services, which encompass the cataloguing, classification, processing, acquisitions and systems, support section with in the unit.

1.4 Problem statement

According to Maponya (2004), evolving information and knowledge has impacted all organisations, including public libraries. This has made KM in libraries important and has influenced every component and operational aspects of a library. Kumar (2010), argues that KM requires more effective methods of information handling, speedy transfer of information, and appropriate linking of information with individuals and their activities. The Local Government New Zealand (2012), states that public libraries provide a wide range of services both physical and virtual, including print and digital lending material, reader development advice, internet access and support, information and reference resources and guidance, learning and e-learning activities, literacy support, cultural promotion, and community development.

Public libraries are part of eThekwini Municipal and its organisational culture. Whatever affects the municipal also has an impact on the public libraries. As a result, the role of public libraries is changing to provide a competitive advantage for the parent municipal. According to Maponya, (2004), knowledge management is a viable means by which public libraries could improve their services in the present knowledge era. Mkhize (2015), argues that individual knowledge does not help the public library because knowledge could be lost if an individual leaves the organisation through death, retirement or resignation.

Knowledge at EML is located in individuals within the department, such as managers, librarians, cataloguers, library processors and library assistants. A number of staff members within the libraries have worked at the municipal for more than 20 years either in one position, or have moved to another section within the unit. The amount of knowledge they have gained through the years needs to be documented and integrated into the organisation to safeguard against loss. The municipal needs to devise ways of retaining employee’s know-how and best practices so that the knowledge can be passed on to future library workers in the municipal.

1.5 Definitions of key terms

This section provides the definitions of key terms used in the present study. The definitions were drawn from the literature review during the execution of this study. They include: data, information, knowledge (tacit and explicit), wisdom, knowledge sharing, knowledge management, and public libraries.

15.1 Data

Kumar (2010), defines data as simple, discrete, facts and figures, such as names, characteristics and amounts. Data might be a table of circulation statistics, but once those statistics are arranged, charted, annotated, or organised in a meaningful way to describe say trends in library use, you have the information. Tuomi (1999), also agrees with the above by defining data as a set of discrete objective facts about events. Data describes only part of what happened, provides no judgement or interpretation and no sustainable basis for action. The term data is commonly used to refer to records or recordings encoded for use in computer, but are more widely used to refer to statistical observations and other recordings or collections of evidence. Data is scattered, unrelated facts, writings, numbers, or symbols.

1.5.2 Information

There are many definitions available in the literature regarding the concept of information. For example, according to Aguolu (2000), information is a message of human experience, a signal, or a stimulus that assumes a response by the receiver, and therefore, possesses response potentials. Womboh and Margaret (2002), define information as processed data that can be safely used for decision making or a natural phenomenon which is abstract but can be manifested or represented in various physical formats. Okee (2005), defines information as a resource that is critical for the growth and development of any individual, group or nation. Information is regarded as a vital resource comparable to other natural resources. Provision of and access to accurate information at the right time and to the right users is important for the growth and development of any society.

1.5.3 Knowledge

Kumar (2010**),** defined knowledge as an intellectual capital when people add value to information. Knowledge is generated, classified, modified and may be indexed. Sharing of knowledge is a core element of KM and in fact knowledge is much more complex than many realize. A working definition of it was given by Davenport and Prusak in their book on KM

entitled Working Knowledge. According to Davenport and Prusak (1998), knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experience and information. It originates and is applied in the minds of the knower. In organisations, it often becomes embedded not only in documents and repositories but also in organisational routines, processes, practices and norms. While data and information are in a sense bound objects, knowledge is much more a process, a dynamic, or an ability to understand and to share understanding. A well-known distinction is that which can be made between tacit and explicit knowledge.

Tacit knowledge

Beijerse (1999), stated that personal or tacit knowledge is extremely important for human cognition because people acquire knowledge by the active creation and organisation of their own experience. This implies that most of the knowledge is tacit and becomes explicit when shared. Allee (1997), argues that tacit knowledge is personal, context-specific, and therefore hard to formalise and communicate. Kumar (2010**),** further implies that tacit knowledge resides in the brains of the people, it is a complex form of knowledge and it has two dimensions namely, technical and cognitive.

Explicit knowledge

Explicit or codified knowledge, on the other hand, refers to knowledge that is transmittable in formal, systematic language. In other words, explicit knowledge is expressed as information in various formats that includes published materials and manuals of rules, routines, and procedures (Nonaka and Takeuchi, 1995). Kumar (2010), argued that explicit knowledge is formal and easy to communicate to others. It is the knowledge of rationality, that is, policies, rules, specifications, and formulae, which is also known as declarative knowledge.

1.5.4 Wisdom

Cooper (2016), defines wisdom as an extrapolative process which includes knowledge in an ethical and moral framework. Wisdom is the process by which we discern right from wrong and good from bad. Wisdom is the optimum judgment, reflecting a deep understanding of people, things, events or situations. A person who has wisdom can effectively apply perception and knowledge in order to produce desired results. Learning is the input side of wisdom, and it can be defined as the acquisition of knowledge, experience, and skills.

Having distinguished between data, information, knowledge and wisdom, it is important to now define KM, KS and the public library.

1.5.5 Knowledge management

When different types of knowledge are understood, it becomes important to explain how knowledge is managed in an organisation. In this study, KM refers to the practice and techniques used by public libraries to identify, represent and distribute knowledge, know-how and expertise to leverage, reuse and share knowledge and learning throughout EML. In brief, KM is generally referred to as the way that public libraries create, retain, and share knowledge.

Many KM definitions appear in the literature, but for the purposes of this study the definition that will be used, has been taken from the Department of Public Service and Administration's (DPSA) Research, Learning and Knowledge Management Chief Directorate.

The DPSA (2005), defines KM as the process of transferring information and best practices from one part of an organisation to another part where it is needed. KM is defined in the literature broadly as a conscious strategy of getting the right knowledge to the right people at the right time and helping people to share and put information into action in ways that strive to improve organisational performance The notion that KM is relevant in government is supported by DPSA (2005).DPSA (2005), highlight KM as an enabler for the 21 Century African public service to be a learning organisation in which people at all levels, individually and collectively are continually increasing their capacity to produce results, where the organisation encourages new ways of thinking, where the collective vision of creating the best is liberated, and where everybody continuously learns how to learn together. DPSA (2005), further states that KM is essential for the African civil service in order for Africa to likely attain the Millennium Development Goals, because KM offers new ways of doing business to continuously solve problems.

1.5.6 Knowledge sharing

According to Blackburn, Khoza and Tate (2003), knowledge sharing is systematically capturing and organising the wealth of knowledge and experience of staff, clients, stakeholders, beneficiaries and partners, making this knowledge readily accessible internally and externally, and linking interest groups and knowledge communities that work on similar initiatives all with a view towards expanding knowledge. Kim and Lee (2006), consider KS as the ability of

employees to share their work-related experience, expertise and know-how with other employees through informal KS within or across teams or work units. These definitions were adopted for the current study, since they place an emphasis on KS as a concept through which employees (library staff) mutually exchange knowledge and jointly create new knowledge that could assist in transforming the library into a more efficient KS organisation. The underlying purpose is to properly utilise available knowledge to improve the group's performance.

1.5.7 Public library

Iwhiwhu and Okorodudu (2012), stated that a public library is established to provide materials, which communicate experiences and ideas from one person to another and makes the information easily and freely available to all people. The public library is a local centre of information that makes all kinds of knowledge and information readily available to its users. It is established, supported and funded by the community, either through local, regional or national government or through some other form of community organisations. It provides access to knowledge, information and works of imagination through a range of resources and services. A public library is also equally available to all members of the community regardless of race, nationality, age, gender, religion, language, disability, employment status and educational attainment. Iwhiwhu and Okorodudu (2012), further stated that people from all works of life use the public library resources, facilities and services. These users include pupils, students, teachers, scholars, scientists, business executives, government officials, and even dropouts. Iwhiwhu and Okorodudu (2012), claim that a large numbers of people also turn to public libraries to satisfy their desire for knowledge or to obtain materials for some kind of leisure-time activities.

A library may meet user's information needs by acquiring, organising and making available relevant information resources backed by appropriate facilities and delivered by means best known to them, which could be manual or through Information and Communication Technologies (ICTs). For any public library to perform well and meet the needs of the users in this modern time, it is necessary for the public library to embrace the use of ICTs (Iwhiwhu and Okorodudu 2012). Schwirtlich, (2010), argued that public libraries play a unique role within society, serving several needs and changing with and in response to public needs. Often called the people's university, public libraries are, unfortunately, currently [operating] with straitened resources responding to a community with growing needs, high expectations, and an abundance of choice.

1.6 Principal theory upon which the research project was constructed

There are various theories and models for studying KM and KS. The model this research was constructed on is the SECI Model of Knowledge Creation (Nonaka and Takeuchi, 1995). The SECI (Socialisation, Externalisation, Combination and Internalisation) model is arguably the best model which embraces the nature of KM. The SECI model of Nonaka and Takeuchi (1995), focuses on the important issues of how knowledge may be created and transferred through organisational sharing, and is useful for identifying and evaluating certain key activities in the management of knowledge. Similar to many other business organisations, public libraries may be regarded as a system of integrated activities and business processes that work together collaboratively in order to achieve overall organisational goals. Nazim and Mukherjee (2016), argues that public libraries are no longer just places to get information, rather they are also where people can exchange information and experiences while learning and creating new knowledge. Other influential KM models were produced by Davenport and Prusak (2000), Hansen, Nohria and Tierney (1999), but they lack certain knowledge processes available in the SECI model. Therefore, due to its comprehensiveness the SECI model was chosen for this study. The model has been tested in public sector environments, of which public libraries are a part.

1.7 Objectives of the study

The main objective of the study is to investigate knowledge sharing practices in public libraries of EML. The specific objectives of the study were to:

- Establish how library staff at EML practice knowledge sharing;
- Investigate the challenges experienced by library staff members at EML when sharing knowledge; and
- Assess the strategies EML could use to overcome such challenges.

1.8 Research questions

The study was guided by the following research questions:

- What was the extent of knowledge sharing at EML?
- What knowledge sharing practices were undertaken at EML?
- What was the attitude and perception of library staff towards knowledge sharing?
- What were the challenges facing the library staff with regards to knowledge sharing?
- What strategies could EML use to overcome such challenges?

1.9 Research methodology

According to Msomi (2015), any research study being conducted needs a suitable research design and methodology for it to be successful and achieve its set objectives. The suitability of research design and methods is determined by the research problem as well as the research objectives and the research questions. This study was guided by the Post-Positivism paradigm. This study used the mixed methods research design in which both qualitative and quantitative data collection methods were used. The population in this study consisted of professional library staff working at EML. The study used a census where all professional library staff were surveyed. Qualitative data was collected from district managers by means of face-to-face and telephonic semi-structured interviews and quantitative data was obtained from the senior librarians, librarians and assistant librarians by means of self-administered questionnaires administered online via email. The qualitative data collected through the face-to-face and telephonic semi-structured interview was analysed through thematic content analysis. The results for the quantitative analysis were established using SPSS. Data is represented in the form of tables and figures, and pie and bar charts with frequencies and percentages.

1.10 Significance of the study

The research project intends to contribute towards the broad field of KS in public libraries, and more specifically the area of KS in such libraries which, have not been researched to any great extent. Although there are some indicators of involvement of eThekwini Municipal in KS in published case studies (through activities such as development of intranets), libraries are still in the early stages of understanding the potential implications of KS. Despite the growing literature on KS and KM practices in South Africa, little attention has been paid to KS practices in public libraries. Much of the research that has been conducted has been focused around university libraries and business organisations. Few empirical studies have been done, especially in South Africa, about KS practices in public libraries, and more specifically, the use of KM tools to ensure that knowledge that exists within individuals is shared among the staff of the library. Thus, the aim of the study was to increase awareness of the importance and benefits of using KM tools, and the value of KS in a public library, and the need to incorporate a KM strategy in the eThekwini Municipal Library strategy.

1.11 Ethical considerations

The study was conducted in accordance with of the University of KwaZulu-Natal research ethics policy. Ethical clearance was granted to conduct the study. The researcher gained

permission from various authorities at the municipal where the study was conducted. Institutional gate keepers' letters granting permission to conduct research were sent to the relevant people. Respondents were notified that participation is voluntary and that they were free to cease to participate from the study at any time without any prejudice using informed consent.

1.12 Delimitations and limitations of the study

Limitations help to identify potential weaknesses of a study while delimitations assist to narrow the scope of a study to specific individuals or sites (Creswell, 2003). This study was limited to the members at EML and no other units in the municipal. The study involved the collection of qualitative and quantitative data. Qualitative research lacks generalisability, this could be seen as a limitation. However, findings in the present study may be useful to other public libraries situated in a similar location as EML, this would help overcome the mentioned limitation. Although quantitative research is known to provide generalisable results, the return of 151 questionnaires may or may not be seen as adequate for generalisability to KS in other similar public libraries. There are a variety of public libraries in South Africa and this study was focused only on one municipal in KZN. Another limitation was that some library staff did not wish to participate in the study for fear that their jobs will be in jeopardy should they participate. Lack of funding and limited time also caused some constraints when conducting the study.

1.13 Outline of chapters

This section discusses the structure of the study. This study is discussed in seven chapters, starting with an introduction and concluding with a summary in each chapter.

1.13.1. Chapter One: Introduction

This chapter provides an overview of information that gives context to the study. The chapter provides an introduction and background to the study, identifies the research problem, the background to the study and EML. Research objectives, research questions, significance of the study, delimitation, definition of terms and concepts, and principal theories upon which the research project was constructed are also covered. The chapter also outlines the research methodology, ethical considerations, and validity and reliability of the study.

1.13.2. Chapter Two: Theoretical framework of the study

Chapter two provides a detailed presentation of theories underpinning the study. It discusses the SECI model and its relevance to KS at EML.

1.13.3. Chapter Three: Literature review

Chapter three provides a review of related empirical and theoretical literature based on the study's objectives. This chapter aims to show what research has been previously done, what the existing gaps in knowledge are and hence, why the present study is needed.

1.13.4. Chapter Four: Research methodology

This chapter covers the discussion of the research methodology and methods used in order to achieve the objectives of the study. The chapter includes: paradigms, approaches, research design, choice of method, area of the study, population of the study, data collection methods, research instruments, data quality control, ethical issues, and data processing and analysis.

1.13.5. Chapter Five: Presentation of the results

The chapter presents the presentation and interpretation of analysed data that comes from the responses obtained from the case study. The data is presented in figures, tables, pie and bar charts (with frequencies and percentages).

1.13.6. Chapter Six: Interpretation and discussion of the findings

This chapter discusses the findings of the study, resulting from both the qualitative and quantitative analysis of data. The discussion of the findings is based on the objectives of the study. The findings were related to literature reviewed in the field of KM and the KM theoretical models that underpinned the study.

1.13.7. Chapter Seven: Summary, conclusion and recommendations

This chapter presents a summary of findings, conclusions and recommendations based on the research problem and research questions that were investigated.

1.14 Validity and reliability

Several major steps were carried out to enhance reliability and validity of the data that were collected. The survey questionnaire items were edited to suit the study in order to determine

content validity, which determines the adequacy of the characteristics in describing the study. Questionnaire items were adapted from similar previous studies, where the scale items were found to be valid.

Reliability (trustworthiness) of the data collection tools was achieved by making sure that the instruments measure the constructs of interest (Powell, 1985). Pre-testing of the questionnaire was done to ensure reliability and validity. In fact, the questionnaire was pre-tested by library staff at the Msunduzi Municipal Library Services, main library (Bessie Head Library in Church Street Pietermaritzburg), to determine their understanding of the items included in the questionnaire and also to incorporate any useful suggestions and recommendations that the staff made.

The researcher decided to use Msunduzi Municipal Library Services to pre-test because it is said to be the second biggest Municipal in KwaZulu-Natal after eThekwini Municipal. The interview pilot was undertaken with the library manager and the questionnaires undertaken with principal librarians, senior librarians and librarian at Bessie Head Library.

1.15 Chapter summary

Chapter One provided a brief introduction to the concept of KM and knowledge, highlighting the background to this study, as well as the significance of such a study, a statement of the problem, objectives of the study, research questions, delimitation and limitations of the study, definition of key terms used in the study, significance of the study and the principal theory upon which the research project was constructed. This chapter also discussed the research methodology used, as well as, ethical considerations, and an outline of dissertation chapters was provided.

CHAPTER TWO: THEORETICAL FRAMEWORK OF THE STUDY

2.1 Introduction

The previous chapter introduced the reader to the study and covered the background, research problem, research purpose, research questions, delimitations and limitations, justification and significance of the study. The chapter provided readers with the contextualised definitions of key terms. This chapter discusses KM theories that are used to study KS. The chapter starts by explaining the concept of a theory and its relevance in research. According to Muchaonyerwa (2015), a theoretical framework provides a particular perspective from which to view a topic. Theories help the researcher make logical sense of the relationships between the variables related to the problem being studied. Theories also provide guidance to a research project. Muchaonyerwa (2015), further states that a theoretical model provides the lens through which reality is viewed. Theories explain and predict the behaviour of phenomena and help to make research findings meaningful and generalisable.

There are a number theoretical foundations used to give support to research in KM. The theories discussed in this chapter include knowledge-based view of the firm, social network theory, voluntary, information and knowledge sharing (VIKS) model, social exchange theory, and organisational knowledge conversion theory. According to Andries (2016), these theories emanate from various academic disciplines, such as information systems, public administration, social psychology, and sociology. Andries (2016), argued that since KM theories emanate or borrow from various academic disciplines means that KM is interdisciplinary and still a young academic discipline that is yet to develop its own theories. Before deliberating on some theories of KM, it is important to reflect on the epistemology and ontology of knowledge. The major purpose of this study was to investigate KS practices in the public libraries of EML, which is why a discussion of KM is relevant.

2.2. Epistemology and ontology of knowledge

There are two dimensions for knowledge creation: epistemological dimension and ontological dimension. Nonaka (1994), explains that the first dimension relates to the conversion of knowledge from tacit level to explicit level, and from explicit level to the tacit level, while the second dimension relates to the conversion of knowledge from individuals to groups and

further conversion to organisation. Nonaka (1994), further states that combination of these two motions results in a spiral model for knowledge creation and processing.

2.2.1 Epistemology

According to Andries (2016.), the epistemological perspective focuses on tacit and explicit knowledge. Nonaka and Takeuchi (1995), state that tacit knowledge is difficult to communicate because it exists in the minds of knower and is normally captured through experience, observation, imitation and face to face meetings. Effective sharing also needs mutual trust among individuals. Explicit knowledge is the knowledge that is documented and is easy to share among individuals because it can either be in hard copy or soft copy, written form, recorded, or pictorial (Nonaka and Takeuchi 1995).

2.2.2 Ontology

The ontological extent of knowledge creation ranges from individual to group, team and organisation (Andries, 2016). Nonaka, Krogh and Voelpel (2006), state that the ontological extent is also related to the levels of knowledge creating entities; individuals, groups, organisational, inter-organisational and technology entities. According to this theory, knowledge creation originates within the individual and develops through social interaction from individual to individual, from individuals to teams, and then from teams to the whole organisation. Therefore, the organisation defines specific problems, identifies the knowledge, shares it, and develops new knowledge to solve the identified problems. Both tacit and explicit knowledge can be shared and ultimately used to create new knowledge.

2.3 Theories of knowledge management and their purpose

In order to situate KS in EML, it is crucial to first discuss the theories relating to KM. For the purpose of this study some theories that relate to KS are explained. The theories were used to establish a theoretical grounding for investigating KS in EML.

2.3.1. Knowledge-based view of the firm

According to Curado (2006), the knowledge-based view of the firm originates from the resource-based view of the firm. The knowledge-based theory of the firm by Grant (1996), explains certain premises regarding the nature of knowledge and its role within the firm. Ekore (2014), asserts that the theory explains the rationale for the firm, the delineation of its boundaries, the nature of organisational capabilities, the distribution of decision-making

authority, and the determinants of strategic alliances. Nonaka (1994), argues that knowledge is the key productive resource of the firm as well as a principal source of competitive advantage. Sveiby (2001), is of the opinion that employees can use their competence to create value by transforming and converting knowledge externally or internally in the organisation they work for. Kaplan, Schenkel, Krogh and Weber (2001), state that an important aspect of the knowledge-based theory of the firm is that the source of competitive advantage resides in the application of the knowledge rather than in the knowledge itself. The central competitive dimension of the firm hinges on how the firm creates and transfers knowledge efficiently within an organisational context. Ekore (2014), contends that individuals are the main holders of knowledge created and applied by firms in the production of goods and services. This implies that management is faced with the responsibility through the organisation's practice to help tap into employees' knowledge and successfully transfer it to the organisation for optimal productivity and profitability. According to Ekore (2014), the organisational practice focuses on factors such as organisational culture; which describes the attitude, experiences, beliefs and values as well as specific collection of norms that are shared by individuals and groups in an organisation. Essentially, the knowledge-based view of the firm theory is based on the following assumptions as outlined by Grant and Baden-Fuller (1995):

- Knowledge comprises information, technology, know-how, and skills.
- Knowledge is the key productive resource of the firm in terms of its contribution to value added and strategic significance.
- Knowledge is acquired by individuals, and in the case of tacit knowledge, it is stored by individuals.
- Due to cognitive and time limitations of human beings, individuals must specialise in their acquisition of knowledge.
- In an organisation production typically requires the application of both tacit and explicit knowledge.
- Even though, this theory views knowledge as a strategic resource for an organisation, the researcher contends that the knowledge-based view of the firm is not an appropriate lens to study public libraries. The theory is mainly focused on the concept of competitive advantage which is largely applicable in private sector organisations.

2.3.2. Social network theory (SNT)

Wasserman and Faust (1994), define the social network theory or analysis as a sociological paradigm to analyse structural patterns of social relationships. It is composed of a series of social relations among connected behaviourists (nodes). Among these relations, the node of the comparatively stable relations constitutes the social structure. Lei and Xin (2011), are all of the opinion that the study of KS in scientific groups must be related to interaction among members: both the socialised process of knowledge passed to the whole group via individual exchange and the internalised process of knowledge absorbed via communication with other members. Therefore, social network theory is used to study the relation structure between nodes, as well as the behaviours of the nodes embedded in the network, and the characteristics of the whole network. This theory provides a set of methods and measures to identify, visualise, and analyse the informal personal networks within and between organisations. Social network theory views KM in terms of a group relation network (Cross, Parker and Borgatti, 2002). An interpersonal relation network affects the production and sharing of the knowledge of the group. Furthermore, the social network of the group plays a significant role in the sharing of tacit knowledge. The social network theory states that through a social network, group members can acquire knowledge, information, resources, and social support to identify and make use of opportunities. Kanter (2001), avers that organisations that develop networks, both internal and external to their organisation, are able to deal with knowledge more effectively than other organisations. In an organisation, networks may be formal or informal. In KM the major focus is on informal networks because tacit knowledge flows freely in informal networks. According to Müller-Prothmann (2007), social network analysis can help support KS by focusing on the following applications of KM:

- Identification of personal expertise and knowledge,
- Research into the transfer and sustainable conservation of tacit knowledge,
- Discovery of opportunities to improve communication processes and efficiency.

Thus, social network analysis provides a systematic method to identify, examine and support processes of KS in social networks (Müller-Prothmann, 2007). In sum, social network analysis is the mapping and measuring of relationships and flows between people, groups, organisations, computers or other information/knowledge processing entities. In the context of KM, social network analysis (SNA) enables relationships between people to be mapped in order to identify knowledge flows and answer the following questions: who do people seek information and knowledge from? Who do they share their information and knowledge with?

In contrast to an organisation chart which shows formal relationships - who works where and who reports to whom, a social network analysis chart shows informal relationships - who knows who and who shares information and knowledge with who (Schunter, 2016). This may help managers at EML to visualise and understand the many relationships that can either facilitate or impede knowledge creation and sharing. The appropriateness of this theory for studying KS in public libraries was assessed and it was deemed to be inappropriate. The theory was rejected on the basis that it often ignores the individual agency which refers to the capacity of individuals to act independently and to make their own free choices (Barker, 2005). In knowledge sharing an individual's capacity to make their own decision (whether to share knowledge or not) is a critical and important aspect to consider.

2.3.3 Voluntary, information and knowledge sharing (VIKS) model

According to Lee, Foo, Chaudhry and Hawamdeh (2004), the VIKS model was developed using the grounded theory methodology. This model focuses on understanding the perceptions of staff and motivations behind participation in KS and factors that impact voluntary, informal KS. According to the VIKS model, as cited by Lee at al. (2004), knowledge sharing can either be formal or informal. Formal KS can take place in meetings, conferences or workshops. Informal KS can take place during lunch times in canteens or in informal meetings during a person's spare time. The VIKS model asserts that voluntary information KS is mainly perceived to be a face-to-face activity. Lee et al. (2004), noted that KS can either be voluntary or mandatory. Voluntary knowledge sharing is the form of KS that is normally expected as part of one's job. For example, in a public library setting, voluntary KS may include activities such as workshops, online database training, and library services provided by librarians.

Lee and Al-Hawamdeh (2002), argued that the VIKS model has received a lot of criticism from various scholars who claim that voluntary information KS is a risk-taking activity. This is because the authors feel that personality plays an important role in the VIKS model. For example, people who like to talk find it easier to participate in VIKS and there is the risk that a person who volunteers the suggestion may end up having to implement the suggestion. Lee and Al-Hawamdeh, (2002), further states that the degree of formality pervades KS in VIKS, since the role-players are well defined and will act primarily as transmitters. The implication of this model for the present study rested on the assumption that the VIKS model is perceived to be a face-to-face activity which is voluntary or mandatory. Knowledge sharing can thus be

supported through various ways such as implementing enabling strategies that recognize and support knowledge sharers if a culture of KS exists in an organisation.

2.3.4 Social exchange theory (SET)

Thibault and Kelly (1952), developed the social exchange theory (SET), which is founded on the exchange of rewards and costs that quantify the values for individuals in different situations. Perceived benefits/costs have been one of the most studied antecedents of KS. Blau (1964), reasons that in the social exchange theory individuals are perceived to engage in an interaction with others, expecting some rewards such as respect, reputation and tangible incentives. According to social exchange theory people interact with others based on an individualism analysis of the costs and benefits of such an interaction. (Bock, Zmud, Kim and Lee, 2005) state that KS could be regarded as a kind of social exchange with people sharing their knowledge and skills with their colleagues and expecting, reciprocally, to receive others' knowledge in return.

Jinyang (2015), suggests that the core of the theory is the principle of reciprocity to which the interpersonal relationship adheres. Weber, Malhotra and Murnighan (2004), emphasises that individuals evaluate the perceived ratio of benefits to costs and base their decisions on the expectation that it will lead to social incentives such as appreciation, respect, reputation or even altruism, and tangible incentives. Future reciprocity, status, job security, and promotional prospects are also perceived benefits that may regulate people's KS behaviour, says Davenport and (Prusak, 1998).

Researcher Liu and Liu (2011), shows that to maximise the gained resources, individuals may build social relationships with others by sharing their knowledge. In literature, the effect of organisational rewards on knowledge-sharing behaviour is inconsistent. Lee, Kim, and Kim (2006), found that reward systems were significant variables that affected employee knowledge-sharing capabilities. Lin (2007), however, found that organisational rewards did not have an effect on employees' willingness to share knowledge with their colleagues. These contradictory findings often cause problems in both theoretical interpretation and practical implementation. Knowledge sharing with other members tends to be the biggest challenge for individuals. Perhaps this could be attributed to the notion that KS is usually not natural (Davenport and Prusak, 1998). However, Bock et al. (2005), noted that people share what they know when their interests outweigh the costs of knowledge contribution. People consider their

knowledge as important and as such may be suspicious of the knowledge from others. Jinyang (2015), holds the view that it is only when each party can get useful information or knowledge from the other party that, the two parties will continue to cooperate with each other. In every situation, people help others with the expectation of gaining something in return. As such, employees in public libraries engage in an interaction with the expectation of reciprocity (Liu and Liu, 2011).

Rusman, Van Bruggen, Sloep, Valcke and Koper (2012), points out trust as an essential requirement to moderate the relationship of benefits and costs with the actual behaviour. This implies that, the impact of costs and benefits of sharing knowledge in public libraries would be influenced by the levels of trust and confidence involved among the employees sharing knowledge. The researcher did not find social exchange theory to be appropriate for this study, simply because the theory is more relevant for explaining the KS behaviour. Liu and Liu (2011), support this assertion by stating that social exchange theory is mostly used for researching individual's knowledge-sharing behaviour. This contradicts the main task of this study, which is explanation of social phenomena, not an investigation into the behaviour among individuals. Moreover, its application to research on KS intentions has occurred mostly in the information systems and not in library and information science. In addition, this theory is centred on competitive advantage which is more applicable in private sector organisations and thus its applicability in the public library sector, particularly in municipalities is not known or supported by any scientific literature. Therefore, anchoring this study on this theory was likely to yield inconclusive results.

2.3.5. Organisational knowledge conversion theory

This study is anchored on Nonaka and Takeuchi's (1995), organisational knowledge conversion theory which arguably best embraces the nature of KM. KM scholars have accepted the theory as a highly integrative KM approach bringing together a wide range of knowledge processes of generating, codifying, storing, sharing and utilising knowledge (Aurum, Daneshga and Ward, 2008; Mikic, Whiteand and Razak 2009). According to Grant and Grant (2008), the theory is by far the most referenced source in the KM field and it is technologically orientated. Nasser (2012), stated that information and communication technology facilitates KS in an organisation.

Nonaka and Von Krogh (2009), states that organisational knowledge creation theory defines knowledge in three parts, indicating that it has complementary properties: First, knowledge is justified as true belief. Individuals validate the reliability of their beliefs based on their relations with the world. Second, knowledge is the actuality of skilful action (people recognise that someone has knowledge through their performance of a task), and the potentiality of defining a situation so as to permit (skilful) action. Nonaka and Von Krogh, (2009), further state that knowledge allows employees to define, and learn to solve work related problems in an organisation. Third, human knowledge can be classified in to two categories namely tacit and explicit.

Explicit or codified knowledge as coined by Polanyi (1966), refers to knowledge that is transmittable in formal, systematic language. This is knowledge that is uttered, formulated in sentences, and captured in drawings and writing (Nonaka and Von Krogh. 2009). Explicit knowledge is accessible through consciousness and hence Nonaka (1994), opined that it can be captured in the records of the past such as libraries, archives and documents. On the other hand, tacit knowledge is knowledge tied to the senses, tactile experiences, movement skills, intuition, and unarticulated mental models. In organisations, tacit knowledge is rooted in action, procedures, routines, commitment, ideals, values, and emotions. Tacit knowledge has a personal quality which makes it hard to formalise and communicate (Nonaka, Toyama and Konno, 2000). Tacit knowledge also indwells in comprehensive cognisance of the human mind and body (Polanyi, 1966). According to Nonaka and Takeuchi (1995), the most important ideas about these two forms of knowledge comes from their dynamics because: for tacit knowledge to be communicated and shared within the organisation, it has to be converted into words or numbers that anyone can understand. It is precisely during this time that this conversion takes place – from tacit to explicit, and, back into tacit that organisational knowledge is created. Nonaka, (1994); Nonaka and Takeuchi (1995), concluded that developing and valuing explicit knowledge is characteristic mainly for the western culture, while developing and using successfully tacit knowledge is a characteristic of the eastern culture which explains the success of Japanese companies.

Nonaka and Takeuchi (1995), developed the KM model which contains four stages of knowledge conversion within an organisation namely: Socialisation Externalisation, Combination and Internalisation. Nonaka, Toyama, and Konno (2000), states that the interaction between tacit and explicit knowledge is not restricted to one ontological level of

knowledge creating entity like individual, group, organisational, and inter-organisational levels. The organisation uses tacit knowledge created and accumulated at the individual levels. Then tacit knowledge is amplified through four stages of knowledge conversion of socialisation, externalisation, combination and internalisation and crystallised at a higher ontological level, and then shared to create new knowledge. Nonaka, Krogh and Voelpel (2006), argue that the combinations of epistemology, ontology, and knowledge conversion are the starting points of the organisational knowledge creation theory developments SECI is also known as the engine of knowledge creation, because of its four stages of knowledge conversion where tacit knowledge can be converted to explicit knowledge and vice versa.

This theory was selected to provide a structured means of discussing KS at EML. The main criteria for selecting a framework for this study were; that, it is used most widely in the literature and it was the most consistent with the latest holistic frameworks. Moreover, the other theories are generic and do not provide a detailed discussion about the contexts of knowledge transfer implementation and the mechanisms by which the knowledge transfer process is carried out.

2.4 SECI model of knowledge creation (Nonaka and Takeuchi, 1995)

According to Nonaka and Takeuchi (1995), the SECI model of knowledge creation has four stages that need to be completed in order to convert tacit knowledge to explicit knowledge (namely socialisation, externalisation, combination and internalisation. For Nonaka and Takeuchi (1995), explicit knowledge is available in the form of files, library collections, or databases, whereas some types of tacit (implicit) knowledge is available which also serves as an organisation's intellectual capital. Tacit knowledge is either difficult or impossible to access, for example the accumulated experiences, creativity and skills that reside within individuals. The SECI model incorporates inherent variables such as the organisational structure, organisational culture, information technology (IT), and management support.

Nonaka and Takeuchi (1995), assert that organisations can reduce the loss of knowledge if appropriate strategies such as performance evaluation, IT infrastructure, mentoring, human resources development/subject matter experts and job rotation polices are adapted. Nonaka and Takeuchi (1995), state that job rotation policies provide the opportunity to transfer skills and share knowledge within the organisation. Nonaka and Konno (1998), indicate that the IT infrastructure is critical to allow for interaction and collaboration between individuals. In

addition, mentorship programmes give the opportunity for senior management or well-experienced staff to share and transfer their skills to juniors before they leave the organisation. (Nonaka, 1994). Junior employees then retain this knowledge. Knowledge creation is a pathway in the organisation, knowledge becomes or expands through the four stages of the knowledge conversion process (SECI) described above. The SECI model is the central base of organisational knowledge creation theory and is also known as the engine of knowledge creation, because of its four stages of knowledge conversion where tacit knowledge can be converted to explicit knowledge and vice versa. The SECI model is presented in Figure 2.1.

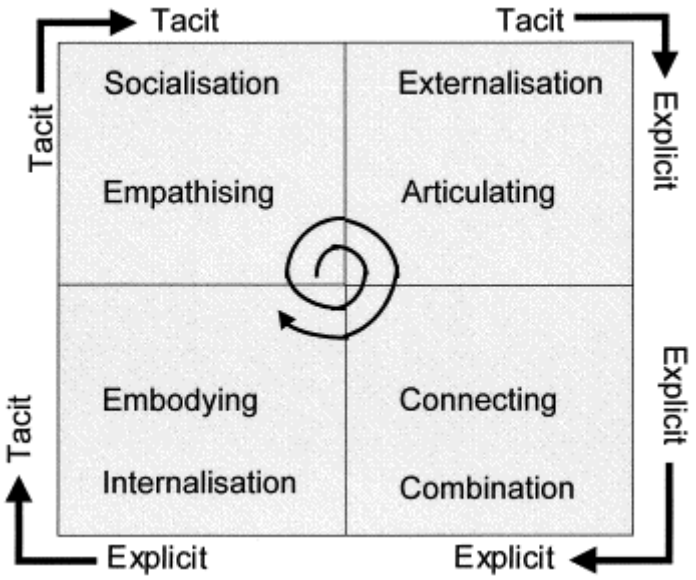


Figure 2.1: SECI Model (Source: Nonaka and Takeuchi, 1995)

2.4.1 Socialisation (from tacit to tacit knowledge)

According to Nonaka and Takeuchi (1995), the SECI model, knowledge creation is a continuous process which involves interaction between tacit and explicit knowledge. According to the SECI model socialisation represents tacit to tacit communication which takes place between people in meetings or in team discussions. The SECI Model suggests that face - to-face meetings are critical for KS to take place and gives room for interaction to happen. By communicating with each other, library staff gain new knowledge that can be shared whether through face-to-face, discussion forums, chat rooms or professional trainings such as attending conferences, workshops or seminars.

According to Ayub, Kogeda and Lall (2017), in the socialisation phase, knowledge is converted into tacit knowledge by sharing experiences. Gurteen (2009), states that the model asserts that

a culture of KS is developed when people share their ordinary expectations and experiences. The transfer of skills and experiences through tacit KS helps avoid knowledge loss when individuals retire or leave the organisation. Knowledge is retained by new and younger employees who remain behind. Nonaka and Takeuchi (1995), further states that socialisation is a process of sharing and converting tacit knowledge to explicit knowledge, thereby creating new tacit knowledge such as shared mental models and task-related technical skills. Socialisation seeks to share tacit knowledge among individuals through, interaction observation, experience and imitation. For example, the employees training on the job acquire tacit knowledge through experience, creative dialogue between individuals and enhancement of mutual trust among them (Nonaka and Takeuchi, 1995). Accordingly, individuals must basically be willing to share and exchange knowledge internally as well as externally in organisations (Holden and Glisby, 2014).

In the public library context, communication between librarians is a social process of sharing knowledge and learning from each other. As a result of continuous interactions among librarians and other professional groups, their knowledge can be transferred from one librarian to another through regular formal/informal meetings, problem-solving sessions, forums, discussion groups, and so on. Daneshgar and Parirokh (2007), state that (ICTs) particularly telephone, e-mail, online discussion forums, social media, as well as internal or external professional gatherings, networking and social artefacts, can also facilitate such interactions.

2.4.2 Externalisation (from tacit to explicit knowledge)

Jugdev (2007), states that the second stage in the KM process is called externalisation which is based on the conversion of tacit knowledge to explicit knowledge communication through dialogue such as brainstorming sessions. In this process tacit knowledge is codified, sorted, categorised and held in a database or document in order to be accessed and reused by others. Maponya (2004), suggests that public libraries are also expected to create, gather, store, and disseminate knowledge to be reused by other employees of the library. Databases of lessons learned, best practices of staff at a reference desk, brainstorming meetings, exchanging ideas in face-to-face interactions are examples of converting tacit knowledge into explicit knowledge in a library.

Nonaka and Takeuchi (1995), stated that in externalisation, knowledge is converted into explicit knowledge that is expressed in a language or symbols understood and shared through

accessible formats. If the knowledge had no explicit form, it would be difficult to distribute and share it across departments. Nonaka and Takeuchi (1995), further states that when tacit knowledge is converted to explicit (externalisation), knowledge is captured in the organisational system, and the knowledge is retained in documents and databases. Retention of knowledge includes all activities that preserve knowledge and allow it to be shared (Tan, Lye and Lim, 2010). Nonaka, Toyama and Konno (2000), revealed that when tacit knowledge is made explicit, knowledge is crystallised, thus allowing it to be shared by others and it becomes the basis of new knowledge. Nonaka and Takeuchi (1995), suggested that concepts and propositions must be expressed in a systematic language and coherent logic based on the commonness of individuals' perception. The success of externalisation process according to Nonaka, Byosiere, Borucki, and Konno (1994), depends on the commitment of individuals in the group.

2.4.3 Combination (from explicit knowledge to explicit knowledge)

According to Nonaka and Takeuchi (1995), the third stage is known as the combination and refers to the conversion of explicit knowledge to explicit knowledge. Combination is the communication of documented (explicit) knowledge through meetings and conversations supported by online systems. Explicit knowledge can be easily captured and transferred to a worldwide audience. Nonaka et al. (2000), states that the combination phase allows for the new concepts generated through externalisation and pre-existing knowledge to be organised into organisational structures, which becomes systemic knowledge. This knowledge can be gathered either from inside or outside the library. The tacit knowledge that has been elucidated in the preceding stage of the model is now subject to sorting, combination and categorisation (Nonaka and Takeuchi, 1995). Explicit knowledge can then be converted into more complex and systematic sets of explicit knowledge that can be shared more effectively (Nonaka et al., 2000). In addition, the key practices of combination are; acquiring, integrating, processing, and disseminating internal and external existing information. Combination can be facilitated using modern technology networks, to store organised information in databases to facilitate sharing of knowledge.

Davenport and Prusak (1998), have formally recognised that libraries can play a critical role in creating explicit knowledge through various activities such as content management, organisation of knowledge, and evaluation of the validity and reliability of information obtained from unfamiliar sources. Further subject guides, lists of reference sources, and

expert's databases (a database that consists of details from experts that agreed to be contacted) are some examples of explicit knowledge that can be created in the externalisation mode but these need to be constantly updated.

In the case of the current study, at the top management level of EML, the combination mode is realised when midrange concepts are combined with and integrated into broad concepts such as organisational goals, vision, and strategy (Nonaka and Takeuchi, 1995). An example, of combination is when the systems section at EML collects all the statistical reports from the other sections and integrates them into one consolidated report to be distributed amongst the entire library staff at EML.

2.4.4 Internalisation (from explicit knowledge into tacit knowledge)

Nonaka and Takeuchi (1995), states that the fourth stage is internalisation which is the conversion of explicit knowledge into tacit knowledge through comparing and combining the acquired (explicit) knowledge with personal knowledge. In this case previous knowledge will be corrected or modified and new knowledge is created within the employee's mind. Conferences, discussion sessions, meetings and professional publications are some examples that provide opportunities for librarians to analyse and assess their knowledge and increase their thinking abilities as well as create new knowledge. Nonaka and Takeuchi (1995), further states that internalisation is when explicit knowledge is transformed into tacit knowledge and becomes part of an individual's basic information store. This involves taking explicit knowledge (for example a document) and sharing new ideas and taking constructive action. This process is facilitated by verbalised or visualised documents, manuals, reports or oral stories that originate from combination (Nonaka and Takeuchi, 1995). The cycle then continues in the spiral of new knowledge back to socialisation when an individual shares his/her tacit knowledge. This is how the amount of knowledge grows and how previous conceptions might change.

Harry (2005), states that explicit knowledge can also be included in experiments that encourage learning-by-doing. This can be a very valuable asset if knowledge is internalised to become part of an individual's tacit knowledge. According to Nonaka and Takeuchi (1995), for explicit knowledge to become tacit, it helps if the knowledge is verbalised or represented in the form of documents, manuals, or oral stories. These authors further state that documentation helps individuals to internalise what they experienced, thus enriching their tacit knowledge.

Employees generally leave an organisation with all their knowledge. Employees are usually happy if knowledge-sharing takes place, especially when new colleagues join an organisation. The creation of knowledge is a continuous process of dynamic interactions between tacit and explicit knowledge. The four modes of knowledge conversion interact in the spiral of knowledge creation. The spiral becomes larger in scale as it moves up through organisational levels, and can trigger new spirals of knowledge creation (Nonaka and Teece, 2001).

All four stages/modes are crucial in the creation of new knowledge, as this, in turn, will result in libraries providing appropriate and timely services to their users. Jantz (2001), believes if public libraries and librarians create, use, and share their organisational knowledge it will certainly improve their operations and services. The process of knowledge creation and conversion is shown in figure 2.1 and is deemed useful for this study in investigating how knowledge is generated, captured, and shared among library staff at the eThekwini municipal libraries. The model can assist with the comprehension of the practices available for KS in public libraries. Nonaka and Takeuchi (1995), suggest that KM in libraries can be classified according to three factors, namely, humanistic/individual, information, and collaboration modes.

2.5 SECI model and public libraries.

The SECI model of Nonaka and Takeuchi (1995), focuses on the important issues of how knowledge may be created and transferred through organisational sharing, and is useful for identifying and evaluating certain key activities in the management of knowledge. The National Library of South Africa (2014), argued that like many other organisations, public libraries may be regarded as a system of integrated activities and processes that work together collaboratively in order to achieve overall organisational goals. Nazim and Mukherjee (2016), concurs with the statement by NLSA that public libraries are no longer just places to get information, but they are also where people can exchange information, and experiences, and can learn and create new knowledge. This model of tacit and explicit knowledge conversion was built on Polanyi's (1966), work on personal knowledge, which suggested that knowledge resides chiefly in the minds of individuals. According to this theory the interaction processes of tacit and explicit knowledge are critical to KM in organisations.

The model focuses on transferring personal knowledge into organisational forms by connecting it to an organisation's knowledge system, and is considered to be the central model of

organisational knowledge creation in part because it brings together a wide range of KM processes such as generating, codifying, transferring and utilising knowledge (Aurum Daneshgar and Ward 2008; Grant and Grant, 2008; Haggie and Kingston, 2003; Mikic, White and Razak 2009; Rice and Rice, 2005). There is a spiral of knowledge involved in their model, whereby explicit and tacit knowledge interact with each other in a continuous process. This process leads to the creation of new knowledge (O'Dubhchair, Scott and Johnson, 2001). Nonaka and Takeuchi (1995), argue that the central thought of the model is that knowledge held by individuals is shared with other individuals so that it leads to the creation of new knowledge. The spiral of knowledge grows continuously as more rounds are completed in the model. Nonaka and Takeuchi (1995), further states that knowledge created through the SECI process triggers a new spiral of knowledge creation, expanding horizontally and vertically as it transcends sectional, departmental, divisional, and even organisational boundaries. As the spiral expands beyond organisational boundaries, knowledge created by library staff, library management, and others, interacting with each other, increases knowledge-creation (Nonaka and Takeuchi, 1995). Other influential KM models were produced by Davenport and Prusak (2000); Bose (2004) and Hansen, Nohria and Tierney (1999), but they lack certain knowledge processes available in the SECI model. Therefore, due to its comprehensiveness the SECI model was chosen for this study. Furthermore, this model has been tested in public sector environments, of which public libraries are a part.

Lam (2000), defined individual knowledge as that part of an organisation's knowledge which resides in the brains and bodily skills of the individual. According to Cao and Xiang (2012), the humanistic/individual mode refers to the sharing of knowledge or experiences from one person to another, which retains the information. Gurteen (2009), points out that sharing has the power to retain individual knowledge, as people do not take a job for life. According to Mitchell (2005), the information mode refers to sharing of knowledge from person to database. With the high levels of ICTs, public libraries strive to link and share knowledge with people/individuals from different geographical areas. Mitchell (2005), argues that if the library has no culture of KS it is possible that staff may not find ICTs useful and there is likely to be resistance to sharing knowledge through such network systems.

The collaboration mode refers to sharing knowledge through an integrated system such as an intranet, utilising knowledge space such as a Local Area Network (LAN) (Mitchell, 2005; Nonaka and Takeuchi, 1995). Library staff can share internal documents, reports, municipal

records, statistical reports, policies and procedures, operational brochures, notices and news, activities, training materials, and job opportunities, directly in this way. Tacit knowledge can be shared and transmitted through communication with each other and in addition brainstorming among staff can generate new ideas and knowledge. In these ways, explicit knowledge can be converted to tacit knowledge, thus enhancing the efficiency of the library operations (Nonaka and Takeuchi, 1995 and Mitchell, 2005). Foos, Dana, Torben and Mia (2002), emphasises that library staff needs to acquire KM skills to re-position themselves in an environment which is continuously changing. The key factors which impact whether knowledge can be shared or not lies in the organisational culture, especially if the library has the policies and practices that could enhance KS.

Nonaka and Takeuchi (1995), suggests that public libraries must organise training sessions to provide staff with proper education opportunities, since collaboration and training are critical strategies of KS. According to Edmonson (2010), the biggest part of knowledge in an organisation is the tacit knowledge which lies in the brains of staff. For this reason, tacit knowledge must be shared and transmitted. A study done by Jia, Song Gen and Shin (2012), in China, used the SECI model to investigate KS practices in libraries and found that, through communication, tacit knowledge in everybody's brain was shared and transmitted. Similarly, a study done by Parirokh, Daneshgar and Fattahi (2008), in Iran, to identify KS requirements in academic libraries used the SECI model. The focus in the present study was on public libraries where many similar practices and procedures can be adopted from, based on studies done previously which have focused on academic libraries. The results in the current study revealed that the majority of libraries surveyed were quite friendly towards KS and the majority of librarians valued the importance of KS.

Nonaka's work is considered the most referenced material in the field of KM (Grant and Grant, 2008). However, the SECI model of Nonaka and Takeuchi (1995), has received criticism from many scholars. For example, Adler (1995) points out that most of the SECI modes have been studied by other disciplines, something Nonaka appears to have overlooked. Again, its weakness is that the model was developed specifically for the knowledge-creating company in a Japanese context, which relies heavily on tacit knowledge (Andreeva and Ikhilchik, 2011; Weir and Hutchings, 2005). In spite of disagreements with Nonaka's model found in the literature (Adler 1995; Andreeva and Ikhilchik 2011; Weir and Hutchings 2005), the SECI model of knowledge creation is still useful, since each process is expected to improve the

effectiveness of KS by providing library staff with the knowledge needed to perform their tasks effectively and efficiently.

2.6 Chapter summary

This chapter has discussed various KM theories relating to KS in organisations. The theories discussed were the Knowledge-based view of the firm, social network theory, VIKS model, social exchange theory, and organisational knowledge conversion theory. Each of these theories was also assessed for its appropriateness and relevancy for studying KS practices in public libraries of eThekwini Municipal. The researcher found Nonaka and Takeuchi's organisational knowledge conversion theory to be the appropriate theory for studying KS in public libraries of eThekwini Municipal. The SECI model was discussed in greater detail because the study is largely informed by the SECI model of knowledge creation (Nonaka and Takeuchi, 1995), especially with regards to how knowledge is captured, created and acquired in public libraries through the conversion of tacit and explicit knowledge via four stages/modes of communications. The SECI model was also suited for understanding the enabling practices available for KS among library staff. The next chapter reviews literature in line with the aims and objectives of the study.

CHAPTER THREE: LITERATURE REVIEW

3.1 Introduction

The previous chapter discussed some theories that relate to KS in organisations. This chapter provides an overview of the literature for studying KS in organisations, particularly in public libraries. The literature review is that part of the thesis where there is extensive reference to related research and theory in the field of focus; it is where connections are made between the source texts that one draws on and where the researcher positions herself and her research among the sources (Ridley, 2012). The literature review serves to put the researcher's efforts into perspective, situating the topic within a larger knowledge pool and it creates a foundation, based on existing related knowledge (De Vos, Delport, Fouché and Strydom, 2011). According to Henning (2004), in order to show how the research is related to previous studies, the literature review needs to be critical and also needs to assess the strengths and weaknesses of previous work, including omissions or bias, taking into account justifiable arguments (Kemoni, 2008). Therefore, a good literature review identifies the different views, agreements, disagreements and trends of thought on the topic being researched (Stilwell, 2000).

The purpose of the study was to investigate KS practices in public libraries using a case study of EML. The scope of the literature surveyed covers scholarly journals, theses, websites, textbooks, and databases such as Sabinet, Emerald, Ebsohost, ScienceDirect, ProQuest and Google Scholar. The geographic coverage of the literature reviewed includes the world view, the African and then South African view. To have a better understanding of the KS framework, the researcher outlined the relationship between data, information, and knowledge. The following research questions were addressed:

(1) What was the extent of knowledge sharing at EML?
(2) What knowledge sharing practices were undertaken at EML?
(3) What was the attitude and perception of library staff towards knowledge sharing?
(4) What were the challenges facing the library staff with regards to knowledge sharing?
(5) What strategies could EML use to overcome such challenges?

3.2 Relationship between data, information and knowledge

Nazim and Mukherjee (2016), state that the concept of knowledge and information is often used interchangeably. Therefore, in order to understand the concept of knowledge, it is important to recognise how knowledge is different from data and information. According to Roberts (2000), some people view data, information and knowledge to mean one and the same thing. The relationship between these three aspects is usually depicted as a hierarchy consisting of data at the bottom, followed by information, and with knowledge on top. This is to say that knowledge is derived from information, in the same way that information is derived from data.

Davenport and Prusak (2003), argue that the human being plays an essential role in processing and transforming information into knowledge and this involves a level of understanding obtained via experience, familiarity, and personal learning. In order to place knowledge in the context of this study, the researcher will use the progression of data, information and the knowledge continuum which is popular in KM literature. According to Maponya (2003), there is an accepted theory that data evolves to information and when information is received by an individual it is utilised and transformed into knowledge; however, this does not occur in discrete stages of development. Frost (2010), states that data consists of facts and figures which relay something specific, but which are not organised in any way and provide no further information regarding patterns, context and so on. The knowledge, information and data diagram (Frost, 2010) is presented in Figure 3.1.

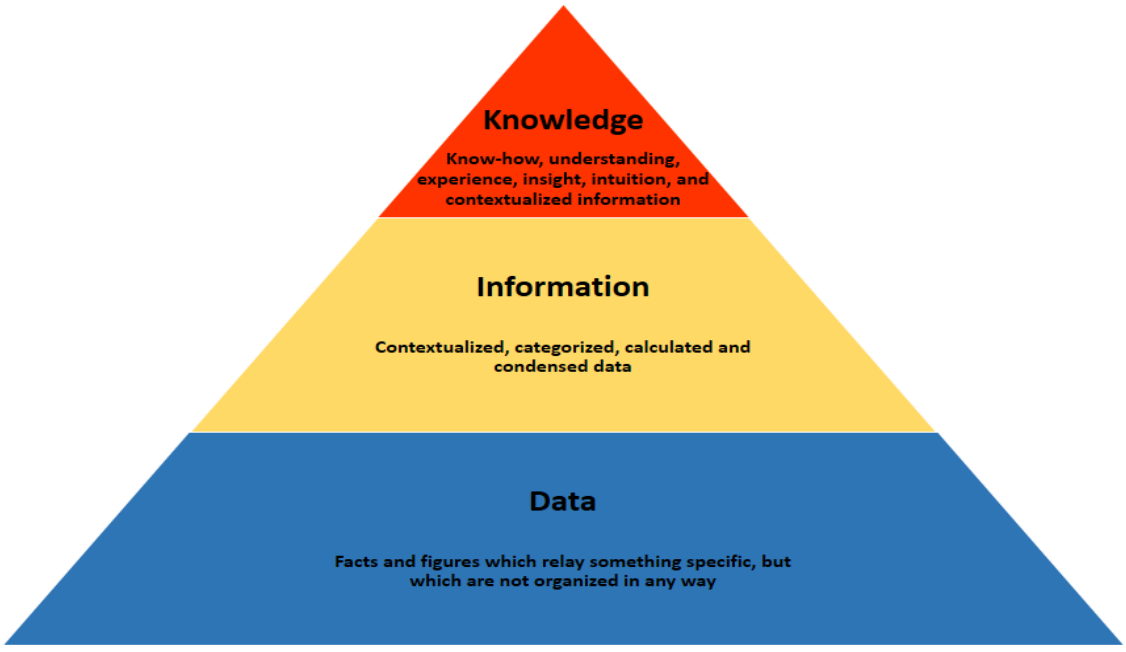


Figure 3.1: Knowledge, information and data (Source: Frost, 2010)

As described by Taylor and Wright (2004), information is data put together to make sense and it is a necessary medium for initiating and formalising knowledge because knowledge is created and organised by the flow of information anchored on the commitment and belief of its holders. Davenport and Prusak (2000), stated that for data to become information, it must be contextualised, categorised, calculated, and condensed. McDermott (1999); Blumentritt and Johnson (1999), argued that not only is information a necessary antecedent to knowledge creation and use, but it is also the medium by which knowledge is transferred. Frost (2010), stated that knowledge is closely linked to doing and implies know-how and understanding. Furthermore, Davenport and Prusak (2000), are of the view that knowledge possessed by each individual is a product of his/her experiences and encompasses the norms by which s/he evaluates new inputs from his/her surroundings. As discussed by Pardo, Cresswell, Thompson and Zhang (2006), explicit knowledge are those elements of knowledge that are recognised and expressed by formal techniques and can be more readily and directly observed, captured or transferred. The subsequent paragraphs define and distinguish between data, information and knowledge.

3.2.1 Data

Alshboul, Al-Diabat, Abu-A'ra, and Aldiabat, (2012), define data as raw facts, which are of no importance in their primary form unless connected and processed to become understandable and beneficial information. Generally, data refers to symbols that are not yet interpreted and understood. In an organisation, symbols and messages that are not interpreted have limited value for the organisation.

3.2.2 Information

In an organisation information can be viewed as a flow of meaningful messages (Nonaka and Takeuchi, 1995). Similarly, Alshboul et al. (2012), views information as the set of data which are organised and coordinated in a suitable manner, whereby they provide a particular meaning, and a coherent formation of ideas and concepts, enabling an individual to benefit from them. Benefit in this regard could mean realising a particular aim such as making a decision in an organisation (Alshboul et al., 2012). Benefit could also be in terms of eThekwini Municipal Libraries using information for solving service delivery problems, and discovering and creating new knowledge.

3.2.3 Knowledge

Nazim and Mukherjee (2016), describes the fact that knowledge is one of the most important assets of an organisation. In literature, knowledge is viewed from three perspectives, namely economical, technological or organisational. The researcher views, knowledge from the organisational perspective that aims to amplify individual knowledge to be a part of the knowledge network of the organisation (Nonaka and Takeuchi, 1995). Omotayo (2015), is of the opinion that organisational knowledge is habitually embedded in organisational artefacts such as documents, databases, organisational processes, and practices and employees' minds. Knowledge also exists in people's minds and is expressed through their behaviours.

Davenport and Prusak (1998), define knowledge as a mix of experience, values and contextual information and is rooted in the human mind. Nonaka et al. (2000), assert that, information becomes knowledge when it is interpreted by individuals and given a context in the beliefs and commitments of individuals. This denotes that knowledge is different from information in the sense that it is restricted to context, is more subjective and is connected to behaviour. A common agreement in the literature is that knowledge is a vital resource for an organisation' success and an important element in human life because unlike other organisational resources, knowledge tends to increase when used or shared, ideas breed new ideas, and shared knowledge stays with the giver while it enriches the receiver (Davenport and Prusak, 1998).

3.3 Importance of knowledge at EML

The concept of knowledge has already been defined and the importance of knowledge in an organisation, particularly in eThekwini Municipal Libraries will now be discussed. Nahapiet and Ghoshal (1998), consider knowledge to be the most strategically important resource for any firm – irrespective of location, size (small, medium, or large organisation) and type (public or private). Gold, Malhotra, and Segars (2001), examined an empirically effective KM model from the perspective of organisational capabilities. Nazim and Mukherjee (2016) argue that in the age of globalisation and increased worldwide competition, many organisations are looking for new ways to gain competitive advantage. For this, organisations are trying to use a variety of organisational resources. Today, knowledge, as an intangible asset has taken precedence over traditional organisational resources such as capital and labour.

This perspective suggests that a knowledge infrastructure consisting of technology, structure, and culture, along with the knowledge process architecture of acquisition, conversion, application, and protection are essential organisational capabilities or preconditions for effective KM. Knowledge has been identified as the most strategically significant resource for organisations to gain competitive advantage and superior performance (Gold, Malhotra and Segars, 2001). Although competitive advantage is more relevant to the private sector, it can be extended to the public sector by including 'serving the public' because servicing the public is the ultimate objective (Ines, Lazer and Binz-Scharf, 2008). Willem and Buelens, (2007), claim that today, public organisations are also known as knowledge-based organisations thus; knowledge is as much of a critical resource to public sector organisations as it is to private sector firms. Employees need to share task knowledge on how to do their jobs and knowledge about the plans, policy, and procedures of the organisation.

Nonaka and Takeuchi (1995), state that 80% of knowledge lies in the brains of people who possess know-how, secrets and personal skills that will never be shared if organisation do not harvest tacit knowledge. This is consistent with Polanyi's 1962, early view that we know more than we can tell. Polanyi's (1962), view is that one person may have much knowledge but may not be able to say much about that knowledge. There are employees, who carry large volumes of knowledge (tacit knowledge) in their heads but they may not be prepared to share the information if they may be in an environment that may limit them from saying much. Tiwana (2008), suggests that, in order to make better use of tacit knowledge, a way must be found for it to be transferred directly from one person to another, making it explicit so that it can be shared throughout the organisation. Nonaka and Takeuchi (1995), further asserted that individuals who are rich in tacit knowledge (experienced employees, retirees, and other talented experts) constitute a wealth of intangible assets for the organisation. Knowledge at EML is located in individuals within the department, such as managers, librarians, cataloguers, library processors, and library assistants. A number of staff members have worked at EML for more than 20 years either in one position, or have moved to another section within the municipal. The amount of knowledge they have gained through the years needs to be documented and integrated into the organisation to safeguard it against loss. EML needs to devise ways of retaining employees, know-how and best practices so that the knowledge can be passed on to future library and information studies professionals.

3.4. Kinds of knowledge required at EML

Scholars of KM have classified knowledge into different categories. According to Rowley (2003), knowledge can be classified into two broad categories, namely, individual knowledge and organisational knowledge. Individual knowledge resides in an individual's mind, whereas organisational knowledge is formed through interactions between technologies, techniques and people.

As maintained by Myers (1996), organisational knowledge is processed information that is embedded in routines and it includes processes that enable action. It is also knowledge captured by the organisation's systems, processes, products, rules, and culture. Thus organisational knowledge in an organisation often becomes embedded not only in the minds of the workers, documents or repositories but also in routine processes, practices and norms. A widely accepted classification of organisational knowledge was proposed by Polanyi in (1966), which was later adopted and elaborated by Nonaka (1991); Nonaka and Takeuchi (1995); and Nokana and Konno (1998). They classified knowledge in an organisation into explicit knowledge which can be documented and implicit or tacit knowledge which resides in the mind, cultures, and the experiences within the organisation (Rowely, 2003). Ralph and Tijerino (2009), define explicit knowledge as formal and systematic knowledge; codified in the product specification or scientific formula, or a computer program, and stored in textbooks, journal articles, business records, documents, databases, web pages, intranets and emails etc. It can easily be captured in repositories, systems, or operating technologies and also made available to all the members of the organisation using high quality, reliable, and fast information retrieval systems.

Davenport and Prusak (1998), define tacit knowledge as informal knowledge difficult to capture and codify and never easy to communicate and share with others. Davenport and Prusak (1998), assert that tacit knowledge represents great value to an organisation, because tacit knowledge is embedded in activities such as problem-solving and creativity but it is more difficult to capture, articulate and diffuse compared with explicit knowledge.

3.5 Knowledge sharing in public libraries

The majority of the literature consulted for this study focused on KS in academic/university libraries or the private sector. Very few empirical studies on KM and KS on public libraries were found. This indicated a knowledge gap for the researcher to fill. Even though most of the literature consulted focused on the private sector and/or academic/university libraries it was

useful for the present study because they assisted the current research and helped guide the study.

The purpose of the current study was to investigate KS practices in public libraries using a case study of EML. As claimed by to Kim and King (2004), knowledge sharing is about communicating knowledge within a group of people. The group may consist of members engaged in a formal or an informal conversation. Kim and Lee (2006), are of the view that KS is the ability of employees to share their work-related experience, expertise and know-how with other employees through informal KS within or across team or work units.

These definitions were adopted for the current study, as it encompasses an emphasis on KS as a concept through which employees (library staff) mutually exchange knowledge and jointly create new knowledge that could assist in transforming the library into a more efficient KS organisation, if utilised properly. The underlying purpose of KS is to utilise available knowledge to improve the group's performance. In this study, as discussed in chapter one where the term KM is broadly used, it also incorporates KS. Gartner Group (2000), and Nonaka and Takeuchi, 1995), define KM as all the activities of identifying, capturing, evaluating, retrieving and sharing all the knowledge assets of an organisation that promotes the application of tacit and explicit KS.

Due to the increasing importance of KS and its components, various studies are conducted worldwide, some of which are discussed below. In their paper entitled KS among architects in a project design team, Zhikun and Fungfai (2009), investigated the relationship among variables of attitude, intention to share knowledge, and subjective norm. Data gathering was carried out by collecting 199 questionnaires from Chinese engineers. The results suggest that the attitude towards KS and subjective norm have meaningful and positive impacts on the intention to do KS and the attitude towards the intention to do KS, respectively.

Chai and Kim (2010), investigated the role of trust in KS among bloggers. Data was collected from 485 weblog users using a questionnaire, Results indicated that trust has a positive and significant effect on intention. In another study, Chen and Hung (2010), identified factors that were considered influential in increasing community knowledge transfer and examined their impact in professional virtual communities. An internet-based questionnaire was used as the data gathering tool. The results suggested that norm of reciprocity, interpersonal trust, KS self-

efficacy, and perceived relative advantage were significant in affecting KS behaviours in professional virtual communities. Furthermore, while the collecting behaviour had a significant effect on community promotion, the influence of contributing behaviour on community promotion was limited.

By distributing online questionnaires, Yang and Lai (2011), investigated KS behaviour on Wikipedia. Findings of the research indicated that intention to do KS and attitude towards KS have significant and positive impacts on KS behaviour and intention to do KS, respectively.

Yet another study was completed by Biranvand, Seif and Khasseh (2015), they investigated factors affecting KS among librarians working in public libraries of Fars Province, Iran. A survey of 180 librarians to revealed that education and consultation programs improved librarians' performance. They found that consultation programs should be designed based on employees' ability and type of activity. The task-technology fit provided the opportunity to make more use of a technology thus improving the user's performance. The existence of mutual trust between the librarians and their organisations, on the other hand, causes both sides to be more amenable to sharing knowledge. The overall findings from Biranvand et al. (2015), was that trust is an important factor in increasing the group performance level. The creation of positive mental thinking in librarians' minds improved their mentality towards their activities and the complexities of their use of a knowledge-sharing system, at the same time, increasing job effectiveness and efficiency.

Considering the importance of knowledge-sharing as the most fundamental function and the most important challenge of KM, the current study presents a comprehensive casual model for predicting the factors affecting knowledge-sharing in public libraries. Seif and Khasseh (2015), asserted that libraries and information centres are amongst the organisations which need KS in their daily affairs. Libraries are expected to deliver high quality information for their users in a reasonable time; therefore, they are considered to be amongst organisations which need to establish KM elements. This would be possible if librarians promoted their specialised information level. As stated by Biranvand et al. (2015), knowledge sharing is one of the most effective ways to increase specialised the knowledge level of staff. It is one of the effective and efficient strategies which managers use to reach a desirable level of knowledge among their staff. Libraries have a vital role in quantitatively and qualitatively improving the KS since they are custodians of knowledge dissemination. Biranvand et al. (2015), further argued that

libraries are able to play their role as knowledge disseminators, when they provide a suitable context for KS among their own staff and, then offer services to the other users and organisations.

In studying the impact of intention to do KS on knowledge sharing behaviour Biranvand et al., (2015), discuss the fact that librarian's tendency to do KS is considered one of the critical and motivating factors for KS. In fact, the immediate reason behind behaviour is behavioural intention and self-conscious decision. If librarians know that the knowledge they share with others will be useful and effective, they will tend to share their knowledge when requested to do so by others. Actually, the librarians' intention to use the KS system determines its effectiveness. Behavioural intention leads desirable behaviour, and is a very important and critical determinant of real use. It is the organisations' task to pay close attention to the potential attitudinal/behavioural issues among their staff and to try to prepare them for knowledge sharing and to give them ways to overcome the resistance to KS within the organisation. It is also crucial to educate the staff on ways for transforming personal and organisational information and knowledge to individual and collective ones. If librarians do not have a strong personal motivation, they will not share their knowledge. Even if they do that, they will often be concerned whether they lose or obtain something by sharing their knowledge.

Biranvand et al. (2015), further state that KS is a definite and positive force in the creation of innovation in organisations. Meanwhile, librarians' behaviour is not a function of their attitudes only, instead, it can be a function of their working environment. Participating in educational training courses does not ensure positive feeling and attitude. If these training courses could improve trust among librarians by creating a positive social atmosphere along with acceptance, they would be considered to be more effective. Results of the research were in line with those concluded by Hwang and Kim (2007); Kuo and Young (2008); Rivera (2009); Lee, Hsieh and Ma (2011); Joseph and Jacob (2011).

Sandhu, Jain and Ahmad (2011), in their study KS among public sector employees aimed to identify the views of public sector employees towards the importance of KS; identify the barriers to KS; and identify initiatives that may encourage KS. The results showed that the respondents were very positive in their views towards the importance of KS and that they also strongly felt that knowledge was a source of competitive advantage. However, they were of the view that the importance of KS was not clearly communicated and many of them were unsure

whether the KS strategy existed in their department. The public sector employees also showed self-serving biases when it came to their willingness to share knowledge compared with their perception of their colleagues' willingness to share knowledge. Respondents perceived organisational barriers as being more critical compared with individual barriers. Main organisational barriers were a lack in IT systems and a lack of rewards and recognition. Lack of time, lack of interaction, and lack of interpersonal skills were identified as the main individual barriers. The most favoured KS initiatives found in this study were use of e-mail systems; inter-agency activities and use However, in the last few years many organisations realised that technology is only an enabler and the main success of KS lies in the hands of people. In other words, the focus of KS should be more on the organisational members who are involved in the sharing of knowledge.

In Indonesia, Anna and Puspitasari (2013), argue that KS is believed by many organisations as a panacea for knowledge creation, and an important activity to boost innovation, improve productivity, and increase understanding among knowledge workers. Anna and Puspitasari (2013), further states that KS has become a crucial activity in KM, and it is adopted by many organisations, especially in the developed organisations. In Indonesia, there are not many organisations that implement KM; however, KS is quite popular and starting to be used by organisations, including libraries. There are not many libraries in Indonesia that formally implement KM initiatives, however, some libraries conduct KS regularly and this has become a formal programme in the library. Many libraries have KS initiative for many purposes, and they have different strategies when conducting KS.

In South Africa, a study conducted by Mkhize (2015), set out to determine key concepts that have to be considered in the facilitation of a KS mechanism in the public sector. The results of the case study revealed that public sector employees are engaging in not-yet institutionalised but effective KS initiatives. Amongst the themes that emerged from a grounded theory analysis are the following: collaborative engagement, communities of practice, learning through discovery and the co-creation of meaning. Some of these themes are sub-themes embedded in the themes discussed above. This study is relevant to the current study as it focuses on KS in the public sector in South Africa. The eThekwini Municipal Libraries forms part of the public sector in South Africa. The conclusions drawn from Mkhize's study helped to guide the present study as to the KS practice in public sectors on a broader spectrum. This study also contributed to knowledge practice in the SA public sector by explicating important factors that knowledge

agents should take into account when facilitating KS initiatives geared towards improved performance (Matlhape and Lessing, 2002).

Despite having different cultures, the role of the academic library is similar to that of public libraries and so certain common strategies will be needed such as commitment to an organisation's mission, and shared values in the mission and vision of the organisation (Greenberg, 2011). The study by Muchaonyerwa (2015), in the context of university libraries in KwaZulu-Natal Province of South Africa found that knowledge that was generated and acquired was not subsequently shared; university libraries lacked KM policies and strategies to harness staff expertise for enhanced service delivery. The researcher further showed that the organisational culture and organisational structure were not conducive for KS. The findings revealed that organisational structure in university libraries is protocol-based making it unfavourable for KS. Even though the study focused on university libraries the methodologies and theories used in this study have been applied in the present study and comparisons were done because the present study is focused on EML which is located in KwaZulu-Natal. The study by Muchaonyerwa, (2015), was informed by the Knowledge Sharing Capability model (KSC), complimented by the SECI model of knowledge creation, also known as the Knowledge Conversion Theory which informs the current study. Muchaonyerwa's study was guided by post-positivism paradigm, using the quantitative and/or qualitative approach. A survey research design and a self-administered questionnaire were employed.

Maiga (2017), conducted a study which investigated the status of KS in universities in Tanzania. The findings indicated that the academics were aware of KM and KS; they participated in KS activities in the universities even though the universities were facing challenges such as limited funds, and problematic KS policies which hindered them from KS effectively. The study was underpinned by the KS model. The study adopted a post-positivist paradigm and a mixed method approach was used, focusing on academics, librarians, and deans of faculties. Data was collected using a survey questionnaire and interview schedule. The methodologies and procedures used in this study will help guide the present study.

Research conducted by Mosala-Bryant (2015), explored KS practices in the South African public service through the lens of communities of practice, which revealed that the level of KS in the Provincial Human Resource Development Forum (PHRDF) was high and KS was regarded as very important by the participants. Knowledge sharing mainly occurred through

interactions during the PHRDF meetings such as discussions of pertinent items in the agendas, presentations of new developments in PHRD by experts from national departments, as well as documents posted on the DPSA website. The findings in this study also revealed that members of the PHRDF were intrinsically motivated to share knowledge. In addition, the author found that extrinsic motivators such as incentives and rewards did not influence the willingness to share knowledge.

Andries (2016), conducted a study aimed to underscore the role of KS in improving the municipal governance in the local government sector of South Africa. The objectives of the study were to find out the kind of KM programmes which were in place in the municipalities of Limpopo Province, to establish the extent to which municipalities in Limpopo encourage KS for improvement of municipal governance, to determine factors which affect KS among employees of municipalities of Limpopo Province, and to propose recommendations and strategies on how to optimally share knowledge in Limpopo municipalities. The researcher sampled 438 employees and 21 managers from the selected municipalities. The major findings of the study were poor KM programmes in Limpopo municipalities, with KS among the employees and across the municipalities not encouraged. Knowledge sharing in Limpopo municipalities was affected by both individual and organisational barriers and under-utilisation of information communication technology tools to support KM programmes and practices. Comparatively, the findings of this study to a large extent support what has been recorded in the literature.

In Africa, many studies have revealed KM and KS practices by some business organisations and academic institutions (Maponya, 2004; Dewah, 2011; Chigada, 2014 and Mavodza, 2010). However, review of the literature revealed that public libraries in Africa had not received much attention despite the growing literature on knowledge sharing and KM practices little attention has been paid to KS and KM in public libraries. Much of the research that has been conducted in developing countries has focused on university libraries and private organisations. The present study seeks to investigate KS practices in public libraries using a case study of eThekwini Municipal Libraries.

3.6 Current status of knowledge management initiatives at eThekwini Municipal

As a result of the assertions that governments have made regarding the knowledge economy, there are high expectations that KM will soon be entrenched within local government sectors

(eThekwini Municipal, 2014). The National Development Plan (NDP), envisages that South Africa will have shifted to a more knowledge-intensive economy by the year 2030 (South Africa, 2011). The eThekwini Municipal (2014), puts forward that in the local government sector, there is a necessity to prioritise KS to the extent that it should be a required skill and competency so that employees may be able to progress KS with the objective of enhancing the knowledge economy.

eThekwini Municipal (2014), pointed out that as a result of uncertainty facing municipalities across South Africa and the need to collaborate, South African municipalities have to accept the importance of KM for improved and efficient service delivery and as a means to keep abreast of changes and be competitive with the rest of the world. According to Kitchin, Ovens and Turpin (2013), knowledge sharing is already taking place in a number of municipalities in South Africa but in a fragmented and scattered fashion as opposed to using recognised KM practices. Kitchin et al. (2013), further claim that the adoption of KM by South African municipalities will allow for the systematic capture and organisation of the abundance of knowledge and expertise of partners, beneficiaries, staff, stakeholders, and clients, thereby allowing knowledge and expertise, which are already within the municipal, to be effortlessly accessible. By means of identifying, creating, organising, storing, sharing, and using knowledge, KS builds institutional memory ensuring that valuable knowledge is not lost when experienced staff members leave an institution.

According to Msomi (2015), KS efforts in South African local government are currently driven by the following metropolitan municipalities: Cape Town, eThekwini, Johannesburg, Buffalo City, Mangaung, Tshwane, Nelson Mandela Bay, Msunduzi Local Municipal, and Ekurhuleni. The nine mentioned cities are members of the South African Cities Network (SACN) and are represented in the SACN's Knowledge Management Reference Group (KMRG). Msomi (2015), points out that the SACN's main activities are to promote innovation and strategic thinking between cities, and update leaders on current and emerging trends in urban policy in South Africa and across the world. Msomi (2015), further claims that the cohort fosters cooperation and exchange of best practice, makes recommendations to member cities and mobilises the capacity of cities to support local and national government. Msomi (2015), is of the view that the KMRG has regular KM peer-based learning sessions and organises KM-related training for city KM practitioners and stakeholders (Msomi, 2015). It uses city KM

units as a direct communication and dissemination point for information and knowledge products and essentially provides learning and sharing platforms.

According to Msomi (2015), all the cities that are members of the SACN are already involved in KS initiatives and have differing KM recognition levels. The scale, emphasis, location, and extent of the KM functions vary across the cities. Kitchin, Ovens and Turpin (2013), is of the view that the mentioned cities are very different in terms of their KM. Cape Town, Johannesburg, and Buffalo City all have KM strategies in place while eThekwini's strategy is still under development. eThekwini Municipal is a unique case in that it is the only municipal to have KM as a part of its Integrated Development Plan (IDP). As a result of the different contexts in which these municipalities operate, one may find that their KM strategies will also differ in terms of focus areas. Cape Town's strategy is to focus more on systems and the use of ICTs, Johannesburg's focus is on processes; Buffalo City's focus is on political leadership; and eThekwini's focus, in terms of the development of their strategy, individual, and groups of people, within the municipal who have been identified as organisational assets.

Msomi (2015), furthers assures that eThekwini, Cape Town, and Johannesburg, (the largest cities in South Africa), as well as Buffalo City, all have reputable KM practices and processes that they are mainstreaming and institutionalising. KM is about finding the balance between systems, people and processes. The balance of these elements determines the focus of the KM strategy.

Barraclough, Averweg and Spencer (2006), found that KM became a strategic issue for eThekwini Municipal as early as 2005 with the realisation that a significant amount of knowledge was generated in the city but at the same time, knowledge was lost when people retired or left the city administration. The aim of the municipal's initial KM efforts was to develop a repository of knowledge and information that would be made available to people in the organisation and other cities worldwide. Four years after its initial foray into KM practice and eThekwini's initial ideas of knowledge storage, sharing and learning have come full circle with the establishment of the Municipal Institute of Learning (MILE) which aims to serve multiple municipal needs by:

- Creating a collaborative platform where knowledge and innovation programmes and initiatives from various departments across the municipal can be coordinated and supported, and

- Building a model of peer-to-peer learning and sharing grounded in eThekwini experience and practice but with a broad reach across Sub-Saharan Africa (Municipal Institute of Learning, 2010).

The MILE was developed as a programme and institutional response to the learning needs of eThekwini Municipal. It comes at the back end of a range of needs based knowledge and innovation that have emerged over the years. Because MILE is not an isolated intervention it must be mindful of other knowledge related initiatives that co-exist in the same space (Municipal Institute of Learning, 2010).

Barraclough et al., (2006), further states that during the mid-1990s eThekwini Municipal developed departmental intranets. Five out of 40 municipal departments set-up their own intranets using various web technologies. These departmental intranets hosted information specific to the departmental 'owners' and there were some links made between them. In a majority of cases, the developments of these intranets were initiated in the IT support sections of the municipal departments (Barraclough et al., 2006). The intranet developments were primarily driven by enthusiasts who did not have to enlist managerial support as there were tools and methods available to them at no cost. This meant that in most cases no formal strategic reasons preceded these developments since the developments were based on the various IT departmental perceptions of how this emerging intranet technology could assist their users to work more productively (Barraclough, et al., 2006).

In his mixed method research design Msomi, (2015), employed a case study strategy with eThekwini Metropolitan Municipal as the case and six municipal units/departments as units of analysis. Msomi, (2015), asserted that knowledge should be managed carefully. However, KM is a relatively new managerial practice, particularly in South Africa. Although there is evidence of KM being introduced and implemented in the South African public sector, there is scant empirical evidence of progress and benefits. Msomi (2015), further claimed that the municipal is innovatively shifting from the rationalist conception of knowledge transfer as objective and universal to the post-rationalist approach (McFarlane 2006). The latter conceives knowledge and learning as partial, social, produced through practices, and both spatially and materially relational. Findings show that the municipal emphasises formal and informal social learning as an important medium for knowledge creation and sharing. However, KM in eThekwini Municipal is somewhat disjointed and not yet holistically embedded. Nevertheless, findings

reveal statistically significant relationships between knowledge creation and sharing as dependent variables, and organisational structure and characteristics as independent variables. Together, interaction of these and other variables demonstrate KM practices implemented in the municipal.

3.7 Enablers of knowledge sharing in the organisation

Knowledge is more than a collection of data or information. It is entrenched in human experience within a social context. The management of knowledge enablers requires close attention to individuals and cultures as well as to information technology and organisational structures (Lopez and Esteves, 2011). In the knowledge-based economy evident in this global era, knowledge sharing is progressively seen as vital to organisational effectiveness. An employee's willingness to share knowledge with fellow colleagues allows organisations to effectively manage their knowledge resources. However, knowledge sharing is challenging in organisations**.** Firstly, employees' tacit knowledge is difficult to share by its very nature. Secondly, knowledge sharing is typically voluntary (Amayah, 2013). Among the factors that affect KS are rewards and incentives, trust, organisational culture, management support, personal motivation, information technology, human resources, organisational structure, strategy and leadership awareness and openness.

3.7.1 Rewards and incentives

Empirical studies on how to encourage people to share knowledge have been conducted. For instance Wang, Noe, and Wang (2014), investigated how to motivate KS in an organisation, arguing that knowledge sharing will be greater for employees who are encouraged, evaluated, and rewarded because knowledge is power and no one is willing to give it away freely without being recognised. Wai Ling, Sandhu, and Kishore, (2009) are of the view that the most effective method to promote knowledge sharing in an organisation is to link it with rewards and performance appraisal. The influence of reward on KS behaviour, appears to be inconsistent in the reviewed literature. Some studies report that individuals' KS behaviour is positively affected by the potential for organisational rewards (Burgess, 2005) or co-worker reciprocity (Kankanhalli, Tan, and Wei, 2005; Lin, 2007). Based on both social exchange and social capital theories, organisational rewards such as promotion, bonus, and higher salary have been shown to be positively related to the frequency of knowledge contribution made to KM systems, especially when employees identify with the organisation (Kankanhalli, Tan, and Wei, 2005;

Lin, 2005). Similarly, Jahani, Effendi, and Ramanyah, (2013) agree that there is a significant relationship between reward system and KS in organisations.

A study by Wai et al. (2009), in an American Multinational Company (MNC) in Malaysia examined the views of executives about KS, barriers to knowledge sharing, and strategies to promote knowledge sharing. A detailed field-base case study of the KS conceptualisation in a large MNC was performed based on a sample of 81 employees. The study revealed that the most effective method to promote KS is to link it with rewards. Wai-ling et al. (2009), found that monetary rewards are more effective than nonmonetary rewards in promoting KS in the organisation. Wai Ling et al. (2009), identified non-monetary rewards as less effective in an American multinational in Malaysia while Sutton (2006), regards non-monetary rewards, such as recognition or training, as more effective compared to financial rewards. Another study conducted in Belgium by Willem and Buelens (2007), focused on specific characteristics of public sector organisations that increase or limit interdepartmental KS. Data were collected by a questionnaire survey given in the public sector. The sample consists of 358 cooperative episodes between departments in more than 90 different public sector organisations. The study revealed that incentivising employees is an important factor that can encourage KS. Oliver and Kandadi (2006), concluded that organisational rewards motivate employees towards KS and foster a knowledge culture.

3.7.2 Trust

Trust is defined as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Boh, Nguyen and Xu,2012) and is said to be one factor that can affect the sharing of knowledge. Boh et al., (2012), contend that employees will feel safer to share knowledge with safety nets in place, such as sanctions, policies, and organisational regulations to protect individuals' self-interests. If the knowledge is abused, then employees have the assurance that the knowledge seeker will be reprimanded. This will thus encourage individuals to engage in knowledge transfer. An environment which is caring and open is key to KS because it inspires relations amongst individuals. Such an environment expedites the sharing of knowledge. In addition, if employees trust an information source to be objective and reliable, then they will be more likely to use the knowledge made available to them. Therefore, trust leads to greater openness between individuals, encourages a

willingness to collaborate with others, and an increase in KS (Amayah, 2013; Al-Alawi, Marzooq and Mohammed 2007).

The availability of trust within an organisation allows for KS because it increases the will of individuals and groups to commit to helping other partners to understand new external knowledge (Boh et al., 2012). As trust becomes part of organisational culture, a more enabling environment for KS is likely to develop. Chow and Chan (2008), aimed at understanding social capital in organisational KS. A measurement tool was developed and then a theoretical framework in which three social capital factors (social network, social trust, and shared goals) were combined with the theory of reasoned action; their relationships were then examined using confirmatory factoring analysis. A total of 190 managers were surveyed from Hong Kong firms. The study found that when there is trust among the employees, whereby the increased performance of a colleague is not seen as a threat by another colleague, knowledge is more likely to be shared. Andrews and Delahay (2000), indicates that when people trust each other, they become more willing to provide useful knowledge and to listen and absorb each other's knowledge. Trust is needed because a large dimension of the knowledge that is to be shared is of a tacit nature.

3.7.3 Organisational culture

Gaffoor and Cloete (2010), define organisational culture as the unique combination of values, beliefs, and models of behaviour in an organisation. They argue that organisational culture is a representation of the institution's main ideals thus prescribing the social standards for employees. Syed-Ikhsan and Rowland (2004), define culture as the shared values, beliefs and practices of the people in the organisation. Boh et al. (2012), says that organisational culture can affect the transfer of knowledge in an organisation. Syed-Ikhsan and Rowland (2004), highlight the importance of understanding the role of organisational culture in knowledge transfer and sharing before attempting to employ new strategies**.** The authors further claim that organisational culture influences the outcomes of other factors, such as management methods and technology which fundamentally bears upon the success or failure of KS. Accorning to Gaffoor and Cloete (2010), an institutional culture that supports KS depicts at least five characteristics. These are: (1) a proclivity towards wide-range KS amongst all employees; (2) the existence of an emancipated workgroup; (3) interaction and communication within and across sections or departments; (4) performance indicators and objectives which are

harmonised throughout the institution, and (5) the presence of a transparent organisational milieu (Gaffoor and Cloete, 2010).

Knowledge culture is by far the most important factor for success of KS. Therefore, creating a KS culture is one of the main concerns for KS (Reid, 2003). Without a proper atmosphere in organisations, other attempts to share knowledge might be pointless (Tohidinia and Mosakhani, 2010). It is argued that a meagre social climate in an organisation might lessen the level of engagement in knowledge sharing (Van Den Hooff and de Ridder, 2004). It is the responsibility of managers to create a favourable climate for KS and one way of doing this is to encourage staff members to consult with their colleagues regarding problems or uncertainties rather than taking the challenge to a manager. Without a conducive environment, competition may affect knowledge sharing in public libraries. Employees compete to be the best employee, wanting to be promoted; this exists in all organisations (Chow and Chan, 2008). The issue is that this could cause knowledge hoarding, which could affect KS adversely since knowledge is viewed as a powerful resource that could create advantage. Tohidinia and Mosakhani (2010), elaborate that the fear of not performing well in an organisation or the fear that other employees would perform better and be promoted or get a raise when knowledge is shared, would ultimately restrict sharing of knowledge. Schepers and Van den Berg (2007), explain that an organisational environment that emphasises individual competition poses a barrier to KS, whereas cooperative team perceptions help create trust, a necessary condition for KS.

Rahab, Sulistyandari and Sudjono (2011), suggest that public libraries can introduce the culture of KS to their employees, by inserting KS practices into the libraries vision and mission. Rahab et al. (2011), further claim that public libraries will also need to change the attitude of employees towards KS. According to Boh et al, 2012 there are two types of cultures in an organisation, namely, individualistic and collectivist culture. Boh et al, (2012), define individualistic people as being prone to viewing themselves as independent of collectives and their ties with others are loose. Whereas, according to Boh et al (2012), collectivists are inclined to share resources with group members and are concerned about the consequences of their actions for the group. Boh et al, (2012), identifies the individualistic culture as the one which is less favourable for encouraging KS and knowledge transfer. This makes it crucial to not only consider the alignment of individual values with organisational culture when looking at knowledge transfer; but to also consider whether or not these are conducive for knowledge transfer (Boh et al, 2012). Gaffoor and Cloete (2010), is of the view that if an institution

possesses an organisation-wide KS system but lacks the organisational culture which supports the KS system then the effectiveness of KS in the organisation is hampered. Rahab et al. (2011), identifies reward systems linked to KS, open leadership climate, and top management support as aspects of organisational culture which are vital drivers of KS. Amayah (2013), claims that's organisational culture establishes work systems, beliefs, and values that impede or inspire both KS and organisational learning. Hence, if the organisational climate is not conducive to KS, then individuals would be less likely to engage in continuous learning and KS.

Amayah (2013), argues that in the public librray, because employees often associate knowledge with power and promotion opportunities, it is more difficult to facilitate KS. The organisational structure, time allocation, leadership, and trust could all be knowledge sharing barriers. This view is supported by Syed-Ikhsan and Rowland (2004), who states that public library employees view information as an asset that must be personally guarded and not passed to other departments or agencies. To these scholars, public library employees tend to be concerned with what they may lose or gain by KS and hence, they need to have a strong personal motivation to share knowledge (Syed-Ikhsan and Rowland, 2004).

3.7.4 Management support

If the KS approach is to be relevant and really geared towards assisting public libraries in improving work processes, efficiencies, and therefore service delivery, support of both political and administration leadership is a prerequisite. The introduction of a KM programme can be a major organisational change and for this reason, the involvement of leadership is considered to be very important (Davenport and Prusak, 1998). Organisations that implement KM programmes may along the way make mistakes that cost money and time. As such, to have a successful KM programme in an organisation depends largely on leadership that values trial and error. The leadership plays a major role in knowledge sharing and therefore the organisational goal of KS for competitive advantage is facilitated by the practices that leadership implements (Singh, 2008). Essentially, leadership is responsible for ensuring that KS objectives are in line with an organisation's business strategy.

Wai Ling, et al. (2009), believed that support from top management is vital to ensure the success of KS in the organisation. Lin (2007), states that management support for knowledge is positively associated with employees' perceptions of a KS culture (for example, employee trust, willingness of experts to help others) and willingness to share knowledge. Gorry (2008),

conducted two case studies on KS in the public sector in the United States of America (USA). This qualitative case study aimed to explore and describe the academicians' knowledge sharing motivations. Data were collected through semi-structured interviews. Content analysis was used to extract the KS motivations from the qualitative data. The study found that lack of institutional commitment (lack of leadership and top management support) are main barriers to KS. Another study by Lee et al. (2006), reviewed qualitative and quantitative studies of individual-level KS. The study established that top management support affect both the level and quality of KS through influencing employee commitment to KM. On the other hand, the exploratory study by Cabrera, Collins and Salgado (2006), investigated, some of the psychological, organisational, and system-related variables that may determine individual engagement in intra-organisational KS. Results from a survey of 372 employees from a large multinational show that self-efficacy, openness to experience, perceived support from colleagues and supervisors and, to a lesser extent, organisational commitment, job autonomy, perceptions about the availability and quality of KM systems, and perceptions of rewards associated with sharing knowledge, significantly predicted self-reports of participation in knowledge exchange.

The study concluded that perceived supervisor and co-worker support and their encouragement of KS also increased employees' knowledge exchange and their perceptions of usefulness of KS (Cabrera, Collins, and Salgado, 2006). Management support and leadership is required to create a climate that encourages the distribution of knowledge, so that people feel safe to contribute towards KS in every way possible. Knowledge sharing in public libraries requires adequate support and dedication from top management as this influences how resources and time are allocated for executing the KM plan (Yeh, Lai and Ho, 2006).

3.7.5 Organisational structure

Gaffoor and Cloete (2010), define organisational structure as the manner in which individuals and posts are organised to make the performance of the organisation's work possible. They argue that a linear rigid top-down structuring of the organisations' functions does not contribute to the practice of creating organisational knowledge. Government agencies such as public libraries are typically hierarchical and bureaucratic organisations, which make sharing of knowledge difficult (Sandhu, Jain and Ahamad, 2011). Bureaucracy is an organisational structure where power and authority are centralised in higher management levels (Lee et al., 2006). Centralisation has a significant negative impact on KS in an organisation. Lee et al.

(2006), point out that centralisation can hinder initiatives of inter-group information exchange and collaboration. This may affect KS because employees always need approval from supervisors regarding most decisions. Public libraries have a top-down bureaucratic structures which are not conducive to the process of creating knowledge since only top management have the power and ability to create knowledge which they use as a tool instead of a tangible product (Nonaka, 1994).

Msomi (2015), claims that a bottom-up structuring of the organisation, in which middle and lower level workers are accountable for the creation of knowledge is equally unfavourable as the top-down approach. However, Msosi is of the view that the bottom-up model can considerably slow organisational processes which can disorient from the achievement of organisational goals. Syed-Ikhsan and Rowland, 2004), stated that formal organisational arrangements which constrict reporting only within sectional or departmental channels limit each section's or department's access to knowledge accumulated by other sections or departments of the organisation. Syed-Ikhsan and Rowland (2004), further claim that this suggests the need for a holistic approach to KS. Gaffoor and Cloete (2010), argue that a model which facilitates employees across all levels working together as a collective in the generation and management of knowledge is required. Syed-Ikhsan and Rowland (2004), assert that the structure of an organisation should stimulate organisation-wide communication which cuts across and within organisational units and supports the interdependence of various networks and teams. Syed-Ikhsan and Rowland (2004), further claims that the realignment of an organisation's structure to expedite the effective flow and creation of knowledge throughout the organisation is a desirable KS strategy. Syed-Ikhsan and Rowland (2004), support the notion that knowledge creation and transfer is certainly enhanced if an organisation implements communication networks which function autonomously. Ongoing functional communication networks allow knowledge seekers and providers easy access to information by means of the shortest path. The incorporation of knowledge transfer, creation and retention into organisational structures must be driven by effective strategy and leadership. Skyrme (1999), highlights that the organisational structure must therefore promote communication across and within organisational boundaries and strengthen interdependence of teams and networks. Gaffoor and Cloete (2010), confirmed that public libraries should create opportunities for employee interactions to occur and employees' rank, position in the organisational hierarchy, and seniority should be deemphasised to facilitate KS. Using a descriptive correlational method, Allameha, Abedini, Pool and Kazemi (2011), examined the relationship between

different kinds of organisational culture and different dimensions of KM. The study concluded that an organisation that is willing to benefit from KS must identify these enablers in order to provide the necessary infrastructure and support. Otherwise they may turn out to be barriers of KS in an organisation.

3.7.6 Personal motivation

Rahab, Sulistyandari and Sudjono (2011), claim that the willingness of employees to share knowledge depends largely on individual factors. Rahab et al. (2011), further claims that the perception that sharing knowledge is effective in helping others serves to motivate employees to share their knowledge with others. Amayah (2013), identifies, community concerns, normative considerations, and personal benefits as three classifications of motivating factors that have a bearing on people's inclination to share their knowledge with other employees. Amayah (2013), defines community concerns as the moral obligation that one feels toward benefiting or advancing other people in one's network. In other words, forming relations with colleagues by sharing knowledge tends to fortify one's position within an organisation and is a means to shape a stronger community. Organisational standards is defined by Amayah (2013), as standards that are required to be followed by individuals, these standards are referred to as normative considerations. These take into consideration cultural norms and values that can influence a person to share their knowledge. Since values affect behaviours, goals and attitudes; people that share values and a common vision are more likely to share their knowledge. Finally, Amayah (2013), affirms that personal benefits attained by individuals from sharing knowledge include those of an intellectual and emotional nature. Moreover, enhanced professional status and reputation, as well as career advancement are personal benefits that could motivate one to share knowledge. Amayah (2013), insists that in this global knowledge-based economy era, this sharing of knowledge and subsequent creation of knowledge is often best accomplished through the use of information technology (IT).

3.7.7 Information technology

Gaffoor and Cloete (2010), identifies IT as fundamental to the upkeep and configuration of KS efforts and endorses KS by expediting swift searches that generate retrieval of and access to information. This subsequently, inspires communication and cooperation among members of an institution. Msomi (2015), also claims that an investigation of the institution and its existing system is needed when an organisation is considering the application of a particular KS tool. This is necessary to establish which device is going to be the best in furthering the contextual

requirements of the organisation. Pinho, Rego, and Cunha (2011), claim that factors that affect KS and transfer include maladjustments between processes and IT systems, and/or between user's needs and IT systems/processes; as well as the problem of poor IT systems and the lack of processes to support information/knowledge distribution.

On the issue of knowledge sharing using IT systems, Panahi, Watson and Partridge (2013), posit two schools of thought. The first advocates that knowledge is either absolutely tacit or absolutely explicit. Proponents of this school of thought contend that since the nature of tacit knowledge is highly personal, IT may not be as useful as face -to-face tacit KS. In contrast the second school of thought argues that knowledge is not neatly divided by absolutism between tacit and explicit knowledge when it comes to the use of IT systems. Rather, knowledge may be tacit across various levels. Those advancing the second school of thought claim that low to medium level tacit knowledge sharing may be effortlessly facilitated by IT, while high level tacit KS can be only fairly supported by IT systems (Panahi et al, 2013).

Averweg (2012), argues that by allowing for the efficient presentation, acquisition and sharing of knowledge, intranet technology is also an essential part of the organisation. This is why an intranet system needs to be well managed to promptly enhance the sharing of knowledge in the institutional environment of municipal organisations. Averweg's (2012), study found that eThekwini Municipal's intranet was at a medium maturity level. Whilst there was information sharing, the intranet was not found to be of use as a structure for sharing knowledge. There was room for enhancement of the content on the intranet although it appeared to augment KS, but did so in a limited capacity.

3.7.8 Human resources

According to Msomi (2015), an organisation's human resources have a significant bearing on the institution's KS practices. Workers' past experiences, qualifications, and skills are valuable to an organisation. Msomi (2015), recognizes that when employees are employed in the right positions, at the right times, the effortless generation of new knowledge can be expected. In addition to pre-existing skills and knowledge, employees are also able to gain important knowledge from training and induction programmes. Ample training allows workers to transfer their knowledge into the institution's policies, traditions, practices, and processes (Gaffoor and Cloete, 2010). The knowledge which employees gain from learning or training will empower them to transfer their knowledge into the organisation's culture, capabilities, strategies,

policies, job descriptions and organisational processes (Syed-Ikhsan and Rowland, 2004). Employees who lack sufficient training and explicit knowledge, labour to keep up with co-workers. It is therefore vital for organisations to institute effective training programmes to assist workers to acquire knowledge and participate in the transfer and creation of knowledge within the organisation.

Gaffoor and Cloete (2010), point out that knowledge contributions from employees who are willing to construct a conducive KS culture are essential for the effective execution of KS in an organisation. This, in fact includes employee willingness to participate in knowledge-based networking activities that promote knowledge creation and sharing. Msomi (2015), points out that organisations should employ KS strategies that are people centred, encourage learning and inspire sharing by means of teamwork and motivation. Such strategies should give workers enough time to learn and reflect on their new knowledge in a way that helps them build upon their existing knowledge. However, Msomi (2015), pointed out a serious problem for KS generally, and the civil service in particular, is that of the high rate of staff turnover.

Msomi (2015), noted that when employees transfer to other posts or retirements from public libraries may result in the loss of vital organisational knowledge and institutional memory. Syed-Ikhsan and Rowland (2004), assert that it is essential to have applicable procedures in place to make sure that knowledge and information is retained within the organisation. Appropriate posting and deployment is also central to KS because knowledge is more likely to be effortlessly created if personnel are placed in posts that suit their skills (Syed-Ikhsan and Rowland, 2004).

3.7.9 Strategy and leadership

Gaffoor and Cloete (2010), suggest that the successful application of a KS system necessitates an organisational strategy that respects the input of various members of the organisation. The authors further suggest that the policies and programmes that evolve from the organisation's strategy should be aligned and jointly accommodating of the organisation's KS strategy. A successful KS strategy according to Gaffoor and Cloete (2010), dependents on leadership which appreciates trial and error and displays dedication to continuous improvement and innovation. Msomi (2015), is of the view that administration, leadership and political strategy highlight the longstanding debate in public administration as to whether the relationship between administration and politics is dichotomous or complementary in nature.

3.7.10 Awareness

Cong and Pandya (2003), believe that the main component for the success of KM is to increase awareness of KS among library staff at all levels in the municipal. Maiga (2017), states that the awareness about the importance of KS is considered as an element that every employee should have, including top management. Msomi, (2015), highlights that if the KS stakeholders are not aware of KS, it is difficult to participate in knowledge creation and sharing.

3.3.11 Openness

According to Ma and Kim (2005), openness of communication in organisations helps improve organisational culture by eliminating bureaucracy and secrecy that hinder KS. The authors further state that individuals with high levels of openness are willing to consider new ideas and unconventional values, and they experience both positive and negative emotions more intensely than individuals who score low on openness. Matzler, Renzl, Muller and Herting (2008), confirm that open people display intellectual curiosity, creativity, flexible thinking, and culture, and thus tend to have more positive attitudes towards learning new things and sharing them with others.

3.8 Knowledge sharing and creation strategies

According to Amayah (2013), Knowkedge sharing refers to the provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures. Lopez and Esteves (2011), contend that organisations generally use two mutually exclusive strategies for KS and creation. The first is known as the codification strategy whereby repositories are used to carefully codify and store knowledge, facilitating effortless use and access for everyone within the organisation. The second is termed the personalisation strategy. Here, knowledge is mainly shared by means of direct person to person contact and the knowledge shared is tied closely to the one who developed it.

Noorderhaven and Harzing (2009), argue that social learning knowledge is formed through dialogues and interactions between people. It emphasises the idea that knowledge is not a physical object that is passed from one person to another but rather it is socially constructed through collaborative efforts with common objectives or by dialectically opposing different perspectives in dialogic interests. Rahab, Sulistyandari and Sudjono (2011), state that at an individual level, knowledge sharing refers to communication between co-workers to assist one

another to achieve higher levels of work-related performance. For the organisation, knowledge sharing refers to processes associated with the capturing, organising, reusing, and transferring of knowledge-based experiences; making organisational knowledge accessible to everyone who needs it. However, Noorderhaven and Harzing (2009), state that social interaction should not be viewed only as a means of transferring already existing knowledge. It is in fact a prerequisite for the production of knowledge as indeed all knowledge is socially constructed Nakano, Muniz and Batista (2013), suggest that socially constructing knowledge while sharing and creating it stimulates employee bonding and united action. Such bonding and action are driven by individual engagement and collective performance concerned with organisational efficacy.

Msomi (2015), asserts that for knowledge to be useful to others it needs to be extracted from the local situation and translated so that it is understandable and the receiver is able to interpret and adapt it to local practices. This is especially true of tacit knowledge, which cannot be simply captured, converted or transferred since it is only manifested via action. Noorderhaven and Harzing (2009), is of the view that social interaction is not only a channel for the transfer of knowledge produced at one end and consumed at another but also an important condition for the possibility of KS and integration. The authors further suggest that social interaction significantly influences the extent to which KS happens, not just within an organisation but also between different organisations.

Lopez and Esteves (2011), revealed that external stakeholders provide opportunities to introduce new knowledge into an organisation. The authors further claim that the acquisition of proficiencies and knowledge from one partner organisation to another or mutual exchange of proficiencies and knowledge creates a deeper and broader knowledge base for partner organisations. The on-going process of acquiring outside information from partners, adapting it to the existing knowledge base and utilising that knowledge to productively embark on functional activities, procreates internal capabilities (Lopez and Esteves 2011). This interchange that empowers people and organisations shows that social capital can be regarded as a factor which contributes to the willingness to share knowledge (Amayah, 2013) as well as to co-create socially constructed knowledge.

Most modern organisations have realised that knowledge has to dynamically flow between employees in order to gain the full potential of this asset. There are various strategies that

organisations may employ to share knowledge. For the purpose of this study the following strategies are discussed. Such strategies are: Community of Practice (COP), newsletters, storytelling, and mentoring. These strategies were selected because of their dominant usage in the literature.

3.8.1 Community of practice

Community of practice is one of the strategies of KS which is supported by research (Majewski, Usoro and Khan, 2011). The term COP was coined by Lave and Wenger (1991), to describe an activity system that includes individuals who are united in action and in the meaning that action has for them and for the larger collective. Brown and Duguid (2001), define COP as people bound by informal relationships who share common practices. This implies that this is not referring to formal structures but rather informal entities, which exist in the minds of their members and are bound together by the connections the members have with each other. Hayes and Walshaman (2000), argue that in order for a COP to be truly active, there should be an active participation of members in other KS activities such as engaging in live chats, question and answers sessions and providing asynchronous feedback on previous postings. However, posting of knowledge entries and other active contributions by some members of a community represent only one side of the equation, namely the supply of new knowledge (Ardichvili, Page and Wentling, 2003). According to Ardichvili et al. (2003), for a community to be vibrant, there should also be active participation on the demand side. To do this, members need to visit the COP website and post questions when they need advice or knowledge. The benefits of a COP seem to be significant. This includes the facilitation of greater variety in the knowledge domains of the members (De Carolis and Corvello, 2006), and overcoming barriers to sharing knowledge that conventional, technology-based KM systems often encounter (Dixon, 2000). An example given by Dixon (2000), is that people who are reluctant to contribute when asked to write something up for the database are willing to share knowledge when asked informally by their co-workers.

There are some challenges that organisations face when adopting a COP. Experience and research show that knowledge for designing an online COP is limited (Barab and Kling, 2004). As such, many COP's are not sustainable. They fall apart soon after their launch due to lack of sufficient energy and synergies or by being formed based on short-term opportunity driven behaviour, both of which lead to uncertainty and mistrust between the members and

consequently a low quality of shared work results (Bettoni, Andenmatten and Mathieu, 2007). Sharing of knowledge in a COP can also be affected by organisational culture, trust, rewards, members' perception towards COP as a tool of KS and most importantly the willingness of members to share knowledge. In this regard, Khuzaimah and Hassan (2012), suggest that organisations should instil the culture of trust and mutual respect among members. Despite some limitations of using COP as a tool for KS, it remains a dominant tool for KS in literature studies. The use of a newsletter as a tool for KS has its own place in the literature, from the face-to-face, off-line setting to the distributed, on-line workspace (Jeon, Kim and Koh, 2011). Jeon et al. (2011), further claim that the use of information and communication technology facilitates functionality and KS in a COP irrespective of members being geographically dispersed. ICTs can be used to enable and enhance collaboration but it cannot make KS happen automatically. It is important to mention that the successful functioning of a knowledge sharing COP depends on members taking an active role in sharing knowledge (Jeon et al., 2011).

3.8.2 Newsletters

Many organisations have their own newsletters to transfer organisational knowledge. Tsui, Chapman, Schnirer, and Stewart (2006), define a newsletter as a collection of articles on organisational activities and related topics, can be useful for raising awareness of new ideas and innovations, and also to promote knowledge-sharing activities. According to Tsui, et al. (2006), newsletters can reach a broad audience, especially if available both in print and electronic versions. All the public libraries that have been researched have newsletters which are published at least quarterly and which are available in both print and electronic formats. Depending on the content, electronic newsletters are uploaded either on the libraries municipal website or intranet. eThekwini Municipal Libraries publishes their newsletters, with the intent to highlight the achievements, and activities of the library, and to inform readers of other library events.

Organisations who need to use newsletters for KS need to be aware of time and financial constraints involved. Newsletters are published at certain intervals, and this may result in information being obsolete by the time the next issue is published. People may not be willing to contribute their knowledge towards the newsletter. It is also costly to print the newsletter. Organisations may close this gap or weakness by using organisational storytelling.

3.8.3 Storytelling

Storytelling has always been one of the most popular and effective ways of knowledge transfer (Botha, 2007). It is a human-centred way of transferring knowledge. Botha (2007), indicates that organisational stories are told mainly during staff induction, formal and informal gatherings in tea rooms, and organised labour meetings. Storytelling in the context of this study can be defined as a detailed narrative of past management actions, employee interactions or, other key events that have occurred and that have been communicated informally (Swap, Leonard and Mimi Shields, 2001). Organisational storytelling and stories are often used to promote KS, inform and/or prompt a change in behaviour, as well as to communicate the organisational culture and create a sense of belonging (Dalkir and Wiseman, 2004). There are a number of conditions that must be met in order to ensure that story telling becomes successful in an organisation. First and foremost, stories are best experienced orally and they are likely to lose much of their effectiveness when simply read as a text. For storytelling to be successful in public libraries, the story has to be compelling, concise, and relevant, capture the imagination and open the creative participation of the listener (Botha, 2007), so that the moral of the story or the organisational lesson to be learned can be easily understood, remembered, and acted upon. Another key prerequisite condition for effective KS through storytelling is the existence of a culture of trust in an organisation. According to Fullmer (1999), people have to trust the integrity of the information they receive and those that send it have to be able to trust that the recipients will use the information in an appropriate manner.

There are enormous benefits associated with the use of storytelling as a tool for transferring knowledge in an organisation. In the view of Botha (2007), story-telling provides a useful tool for capturing and disseminating knowledge in organisations because of its ability to capture SECI mode: Socialisation- where knowledge and values that emerge from the story may stick for a long time in the behaviour of people, Externalisation where tacit knowledge is explicitly exposed, Combination of explicit knowledge, especially if the story is written down and Internalisation where explicit knowledge is turned into tacit knowledge. Storytelling is a natural way for human beings to interact and stories can be easy to remember and they can also contain embedded lessons. Organisational stories have an ability to prevent similar mistakes from being repeated and promote organisational learning and adoption of best practices stemming from the organisational knowledge base (Dalkir and Wiseman, 2004). On this basis the researcher is of the view that storytelling may enhance the flow of organisational knowledge in EML.

There are a number of limitations that must be taken into consideration in order to ensure that storytelling becomes successful in an organisation. Stories are likely to place more demands on listeners, because the sharing of tacit knowledge in the form of stories is more likely to be hindered by a lack of motivation or lack of absorptive capacity of listeners (Szulanski, 2000). Listeners may also raise questions regarding the validity, plausibility, and relevance of organisational stories. Dalkir and Wiseman (2004), shows that the listeners of stories may also reject KS but for different reasons (i.e., the not-invented-here syndrome, which is characterised by general doubt about the validity and reliability of the knowledge). They further state that the shared understanding of the content by both story teller and listener may prove problematic due to prevailing attitudes toward mistakes. Dalkir and Wiseman (2004), contend that cultural differences can also pose a challenge, as some participants may not understand, or may be unable to interpret the often highly contextual, idiomatic description of the critical event in question. Dalkir and Wiseman (2004), further claim that these challenges can range from linguistic problems (stories, are not always easily translated) to more sophisticated challenges posed by differences in value and belief systems. Organisations should take steps to ensure that both story teller and listener have the necessary knowledge base to learn, and to understand each other. To achieve this, organisations should heed Dalkir and Wiseman's (2004), advice:

- Providing training in creativity and experimentation to help overcome lack of motivation, absorptive capacity, and retentive capacity and to ensure that individuals and groups who need to interact and work together have similar knowledge capabilities.
- Investing time and resources in training to ensure building closer relationships between the transmitter and recipient of knowledge.

3.8.4 Mentoring

Research reveals that mentoring enables senior employees to transfer their knowledge, wisdom, specific insights, and skills to their junior employees (Dubin, 2005). Beazley, Boenisch, and Harden (2002), assessed the loss of knowledge as a serious threat. This study was done on the usefulness of mentoring to professions and results indicated that mentoring contributes to KS. Beazley et al. (2002), stated that mentorship entails the pairing of an experienced member of staff with a new employee in order to assist the new employee to acquire new knowledge and skills. There is much to gain by introducing mentorship programmes in an organisation, for instance, it offers opportunities for individuals to pass on knowledge, skills, and experiences.

Sharing knowledge through mentoring would ensure flow of knowledge in public libraries even after an experienced and knowledgeable staff member leaves the organisation. The use of mentoring also has some challenges that need to be taken into consideration. Main challenges emanate from the pairing up of employees, that is, mentor and mentee. A survey by Begel and Nagappan (2008), perceived working with someone with different skills as one of the main challenges, since pairing experts and novices can be problematic as novices may slow down experts. Furthermore, some experts might be reluctant to engage in mentoring.

3.8.5 Information and communication technologies

ICTs are central to the maintenance and organisation of KM efforts (Yeh, Lai, and Ho 2006). ICTs refer to the technology infrastructure and its capabilities of supporting the KM architecture (Allameha, Abedini, and Pool, 2011). It is an important tool for managing information and knowledge in an organisation. This is the reason why most organisations in both the private and public sector are investing in IT. Organisations such as IBM, Intel, and SAP have adopted, for instance, weblogs to facilitate internal communication and external customer interactions (Wang, Chuan-Chuan and Lin, 2011). There is a need for suitable information technology infrastructure in order to facilitate sharing of knowledge in public libraries. Alavi and Leidner (2001), claim that the group of ICT tools that are utilised for the purpose of KM are known as KM systems and are classified into two types, namely: communication technologies (emails, video conferencing, electronic bulletin boards, and computer conferencing) and decision making technology (decision support systems, expert systems and executive information systems). Clearly, ICT has an active role and is a key enabling factor in KM (Davenport and Prusak, 1998).

The role of ICT in KS has been studied by communication theorists. For instance, Yates, Orlikowski, and Okamura (1999), analysed how a firm adopted and used a new electronic medium, identifying different types of communication, or genres, that groups shaped according to their needs, they that these patterns both reinforced and changed the social interactions within groups. ICT makes searching, storing, accessing, and disseminating information easier. Sharing knowledge and information through enablers provides strategic advantages for public libraries to improve decision making and enhance the quality of services and programmes (Zhang, Dawes and Sarkis 2005). ICT is pervasively used in the organisation, and thus qualifies as a natural medium for the flow of knowledge (Allameh, Abedini, Pool and Kazemi 2011) and it determines the knowledge accessibility in the organisation (Gaffoor and Cloete, 2010). ICT

facilitates the transfer and sharing of knowledge by easing communication channels within an organisation. ICT infrastructure is capable of facilitating knowledge flow and eliminating barriers to communication within public libraries. ICT application systems, such as groupware, online databases, intranet, virtual communities, and others can facilitate the KS processes. For example, Huysman and Wulf (2006), indicate that ICT applications enable the rapid search, access and retrieval of information, and can support communication and collaboration among organisational employees and between organisations. This is consistent with Yeh, Lai and Ho (2006), who explain that ICT supports KM by facilitating quick searching, access to, and retrieval of information, which in turn encourages cooperation and communication between members of an organisation. The use of ICT for KS allows public libraries within eThekwini Municipal libraries to overcome geographical boundaries. In essence ICT plays a crucial role in ensuring successful KM initiatives because it is vital for collecting and processing data, storing data in databases and making it widely accessible through the use of an intranet (Gold, Malhotra and Segars, 2001).

The negative side of using ICT in public libraries within eThekwini Municipal may relate to the costs of IT infrastructure itself and to the of training of employees to equip them with new skills for using the new technologies. The other issue is that ICT is limited to the transfer of explicit knowledge and not of tacit knowledge which happens to be very important in any organisation. Availability of ICTs may not guarantee that employees may use it. There might be resistance to adopt new technologies, which may result in new technologies becoming white elephants in an organisation. Thus, organisations need to assess the willingness of the employees towards adopting technological changes. Benson (1998), argues that the information age will fracture societies, make businesses less profitable, undermine cultures, and create mass ignorance on a scale not encountered before. Benson's contention is that any form of communication other than direct face-to-face contact is an impoverished form of communication, depriving cultures and communities of the texture and richness that traditional modes of communication provide. However, a study by McAdam and Reid (2000), found that lack of technology was a major barrier to KS in the public sector**.** Public libraries are no exception in this regard. This problem is also prevalent in other countries. For example, Gorry (2008), who conducted two case studies on KS in the public sector in the USA found that inadequate technology is the main barrier to KS.

Case studies further found that public sector organisations are loosely organised which creates a stumbling block to the creation of a KS culture. Although, ICT can be supportive of more efficient coordination and communication processes, it can also stand in the way of efficiency if it is not properly integrated in an organisation. Therefore, organisational performance in public libraries would depend largely on how knowledge is shared using ICTs. Technology is only an enabler of knowledge building and sharing of knowledge but it does not motivate employees to share their knowledge (Ramirez, 2006). Knowledge management is more about people and organisational culture. If an organisational culture does not support a KM programme, the programme is not likely to succeed. It has been stated that in the twenty first century, knowledge is the most critical asset to be managed for business growth and survival (Halawi, Aronson and McCarthy, 2005) in which ICTs play an important role for the success of any organisation in a knowledge society.

3.9 ICTs that may be used to support `knowledge sharing in an organisation

These include the following:

3.9.1 Intranet

Stenmark, (2002), regards an intranet as an information silo or a repository of unstructured information. This definition elucidates the information-centric perspective of intranets. There are enormous benefits that may derive from using an intranet as a KS tool. Of more importance is that it provides a context where dialogue, reflection, and perspective making could occur. Nonaka and Konno (1998), stated that "ba" is a Japanese word to describe a shared space of physical, virtual, and/or mental nature and they view an intranet as an example of such an environment. An intranet is a powerful tool for communication and collaboration that presents data and information and the means to create and share knowledge, in one easily accessible place (Sayed, Jabeur and Aref, 2009). Furthermore, an intranet offers organisations the ability to centrally find and access organisational information and knowledge to support knowledge workers and KS (Averweg, 2012).

Information and knowledge that can be located in a public library's intranet may include reports, processes, procedures, strategic plans, policy documents, and so forth. Through the intranet these documents can be made available electronically and be centrally accessible. An intranet is therefore well suited for the distribution of data, information, and knowledge in public libraries. The intranet can also facilitate organisational communication and KS. Sayed

et al. (2009), opined that KS can be significantly augmented by the use of the intranet when dealing with organisational communication (for example, virtual meetings, chats, email transactions, conferencing, official memoranda, and so forth.). Brelade and Harman (2003), state that intranets can be used on a 'push' basis, where information is presented to employees, and on a 'pull' basis, where employees may seek out and retrieve information for themselves.

The intranet as a KS environment can be viewed from three perspectives, namely: information, awareness and communication (Masrek, Karim and Hussein, 2008). According to these authors, the information perspective explains that the intranet gives employees access to both structured and unstructured information in the form of databases and documents; the awareness perspective keeps users of an intranet well informed and connected to information and fellow employees in the organisation; while the communication perspective enables employees to collectively interpret available information by supporting a variety of channels for negotiations and conversation. eThekwini Municipal has deployed an intranet as one of its KM tools. Stenmark (2002), highlights that the large amount of information available on the intranet can result in information overload; in order to avoid such a situation and maintain the awareness perspective, tools to assist the organisational member by prompting when new and relevant information is added, must be developed. Another tool that organisations can use to share knowledge is social web 2.0 technologies.

3.9.2 Web 2.0 technologies

Web 2.0 or social web (also called social computing) are social networks for creating and maintaining social connections among individuals (Kerstin, 2010). The term web 2.0 was coined by O'Reilly (2005). It refers to a perceived second generation of web applications that facilitate interactive information sharing, user-centred design, interoperability, and collaboration on the worldwide web. According to Standing and Kinitin (2011), the term web 2.0 refers to technologies that allow individuals to interactively participate with information and with other individuals, and to build networks based on mutual personal or professional interests. Boyd (2006), lists three features that characterise web 2.0 technologies, which are as follows:

- Support for conversational interaction between individuals or groups ranging from real-time instant messaging to asynchronous collaborative teamwork spaces.
- Support for social feedback that allows a group to respond to the contributions of others.

- Support for social networks to explicitly create and manage a digital expression of people's personal relationships, and to help them build new relationships.

Essentially one may characterise web 2.0 by considering the extent to which it supports communication, collaboration, connection, completion and combination of ideas. The advent of the web 2.0 revolution has enabled the realisation of a host of new services and possibilities on the internet. Among many new possibilities, Standing and Kinitin (2011), avers that blogs (like Blogger), video sharing (like YouTube), presentation sharing (like Slide Share), social networking service (like Facebook, LinkedIn), instant messaging services (like Skype) and groupware (like Google Docs) - foster a more socially connected platform. Wagner and Bolloju (2005), argue that they can facilitate KM processes, from knowledge creation and storage, to knowledge use and refinement. Since these processes are carried out conversationally, that is, through a discussion forum (questions and answers), or through a blog (a process of storytelling), or through a wiki (collaborative writing) these technologies present a KM solution that is inexpensive, fast, and supports the collaboration of people in distributed locations. Web 2.0 technologies, have been proposed as a way to overcome the problem of managing tacit knowledge in organisations (Standing and Kinitin, 2011). Web 2.0 applications in general can be considered as communication enablers promoting horizontal KS and a sense of community for its members. It should be noted that web 2.0 communities are not just discussion groups; they offer up-to-date content and continuous community control with regard to member satisfaction (Kerstin, 2010).

The advent of web 2.0, is believed to be the antidote to barriers in KS (Pei Lyn Grace, 2009). For instance, wikis embody the highest attainable information-sharing dream, where a group of members voluntarily and unselfishly collaborate, create knowledge and work towards a common goal. When deliberately used in virtual project management environments they can become an important enabler for knowledge storage and KS. Wikis can be used in project management to generate project documentation, including requirement documents, project plans and schedules, as well as reports and published deliverables (Kerstin, 2010). The use of web 2.0 or social computing as a tool for KS is supported by research. Paroutis and Al Saleh (2009), investigated the key determinants of KS and collaboration using web 2.0 by exploring the reasons for and the barriers to employees' active participation in various web 2.0 platforms within a large multinational firm. The study was based on a case study design where 11 in-depth interviews were conducted. In addition, secondary data was collected. The authors

revealed four determinants of knowledge sharing using web 2.0 technologies, namely, history (established way of doing things), outcome expectations (perceived benefits and rewards, information overload), perceived organisational/managerial support (earlier web 2.0 use, lack of knowledge and training about the tools and their benefits) and trust (quality and accuracy of information, confidential data and reciprocated KS).

It is clear that adoption of web 2.0 technologies may facilitate KS to a great extent. However, it has been noted that the implementation of these technologies is introduced by an individual employee or a small group within the organisation without the support of management (Standing and Kinitin, 2011). As a result, the implementation lacks a strategic intent. An activity that is not linked to business strategy is likely to fail. Another challenge of web 2.0 use in organisation relates to management concerns. A survey conducted by Hasan and Pfaff (2007), used activity theory to analyse the wiki as a tool that mediates employee-based KM activities leading to the democratisation of organisational knowledge. The study revealed that activities supported by social technologies such as wikis, may provide capability for tacit KS. The study found that management rejected the use of wikis in organisations because they perceived it as a challenge to top-down organisational structure whereby communication is hierarchical, as such management was not willing to share knowledge with their subordinates. The study also identified lack of motivation and a culture that is not open to sharing of knowledge as major factors that impede collaboration and KS in organisational social computing. Hasan and Pfaff (2007), further explain that the open nature of the wiki makes it prone to vandalism which is defined as editing the wiki in a wilful and destructive manner to deface the website or change the content to include irrelevant content. Activities of this nature may place an organisation in disrepute and force management to discontinue the use of such technology. Social media are a highly social tool and require a culture of collaboration and the willingness to share knowledge. If there are low levels of participation in the use of web 2.0 technologies, organisations may not be able to derive value from these technologies.

3.10 Chapter summary

Chapter Three provided a review of the empirical and descriptive literature from different studies that were related to the subject under study. The chapter provided a review of literature on KS in organisations. The review started by outlining the relationship between data, information and knowledge. This was followed by the discussion on the importance of knowledge at EML. Subsequent section focused on the kinds of knowledge required at

eThekwini Municipal Libraries. The chapter further discussed KS in public libraries and the current status of KM initiatives at eThekwini municipal. The last part focused on enablers of KS in the organisation and KS strategies. The extant literature on knowledge sharing reveals limited studies on KS in public libraries, especially in the context of South Africa. The next chapter discusses methods employed in conducting the study. The sampling techniques and methods of collecting and analysing data are described to fulfil the objectives of this study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

Research methodology is aimed at exploring, describing and explaining the research problem/phenomenon through an understanding of how research is done scientifically. Research methodology encompasses the rationale behind the methods used to collect data (Babbie and Mouton, 2001). There are various steps that are generally adopted by a researcher in studying his research phenomena (Neuman, 1994). The researcher must be familiar with all the research techniques and methodologies on which the research is based. Welman, Kruger and Mitchell (2005), defines a research methodology as a concept that considers and explains the logic behind research methods and techniques. Simply put research methodology may be defined as the study of methods by which knowledge is gained. This chapter is organised thematically as follows: research paradigm, research methods, research design, population under study, sampling procedures, data collection procedures, data analysis strategies, validity and reliability of data collection instruments, ethical considerations and summary of the chapter.

Considering the fact that KM is interdisciplinary in nature, the researcher used a survey research design. A survey design uses a systematic approach to study the relative incidence, distributions and interrelations of a number of variables that are not manipulated but, which occur in a natural setting (Ondari-Okemwa, 2006). A survey was appropriate for this study because it afforded the researcher an opportunity to ask many respondents several questions at one time (Neuman, 2006). In addition, a survey design was deemed relevant for this study because the researcher was interested in collecting original data to describe a population too large to observe directly (Babbie, 2010). A survey had its own weaknesses such as being inflexible, and the use of a standardised questionnaire for all respondents may not include questions that were appropriate to many respondents (Babbie, 2010). Although a survey provides an effective method to examine the products of social activities, they are not the ideal method to use to examine the activities themselves (Bailey, 1994:288). Additionally, (Ondari-Okemwa, 2006), criticises survey design for its dependency on a respondent's understanding of the situation as well as possible subjective bias that both the investigator and respondent might introduce. According to Ondari-Okemwa (2006), these problems are encountered in most social science research methods and the best means of resolving them are to be fully

aware of their existence and to offset the adverse effects. Respondents should, further, be encouraged to fully participate and identify themselves with the value of the research project.

The researcher integrated research methods even though collecting data through two methods meant more data to collect and analyse, resulting in more time, financial resources, effort and technical expertise (Kumar, 2014). The researcher used a questionnaire with little employment of interviews. The reason for using more than one type of instrument is that both instruments have different advantages. Therefore, their concurrent usage complemented each other. The advantage of using a questionnaire in this study was that it was made to be self-explanatory, so that it could be completed in privacy, at a convenient time for the participant, and without supervision, thus ensuring anonymity. Questionnaires saved time as the researcher was able to collect data from many respondents within a very short space of time as compared to interviews which are performed sequentially. The questionnaire collected mainly quantitative data. The weaknesses of the questionnaire were overcome by interviews which were held with managers. Interviews yielded more qualitative data. The advantages of the interviews were that "the researcher could observe the surroundings, use non-verbal communication and could probe. The main weaknesses of the face-to-face interviews were interviewer bias and besides, the appearance, tone of voice and wording of questions at times influenced the answers (Dewah, 2012). Nonetheless, the interviews complemented and supplemented the quantitative data that were gathered using the questionnaire.

4.2 Research paradigms

Researchers commence a project with certain claims and assumptions about how they will learn and what they will learn during their inquiry. These claims are called paradigms (Guba and Lincoln, 2005; Martens, 1998); or broadly conceived research methodologies (Neuman, 2003). Philosophically, researchers make claims about what is knowledge (ontology), how we know it (epistemology), what values go into it (axiology), how we write about it (rhetoric), and the processes for studying it (methodology) (Creswell, 2009). There are many research paradigms which can be used to guide a study. Different scholars, like Guba and Lincoln (2005), for example, have identified paradigms such as pragmatism, interpretive and positivist, while Crossan (2003) and Zammito (2004), suggest two broad categories: positivism and post-positivism. A paradigm is a set of assumptions, concepts, values and practices that constitute a view of reality (Robinson, 2009; McGregor and Murname, 2010). According to Chilisa and Preece (2005), the research paradigm is importance when conducting research because it helps

to determine the research approaches to be used, such as qualitative, quantitative or both. This in turn influences the method to be used in data collection such as questionnaire, interview, observation or focus group discussion (Chilisa and Preece, 2005). The current study was guided by the post-positivism paradigm, using the quantitative and qualitative approach. The focus of this study was to establish the status of KS practices at EML and the need for a KM strategy to address the sharing of knowledge among staff members. The ultimate aim is to make recommendations that would assist with improving the service to the library clients. There are three main types of research paradigms namely: interpretive, positivist and post-positivist.

4.2.1 Interpretive paradigm

Interpretivism is an epistemological position that prioritises participants' subjective interpretations and understandings of social phenomena and their own actions (Mathews and Ross, 2010). As stated by Quinlan (2011), the interpretivists hold that reality is unique to each individual and to the manner in which individuals, given their own unique set of circumstances and life experiences, constructs, experiences and/or interprets their world. For the interpretivists, the purpose of social research is to understand the meaning which informs human behaviour. They hold the belief that there is not a single reality or truth about the social world but rather a set of realities or truths which are historical, local, specific and non-generalisable (Guba and Lincoln, 1994). There are many possible interpretations of events and situations. Thus, it is recognised that research results are not "out there" waiting to be discovered by the researcher, but they are created through interpretation of data (Guba and Lincoln, 1994). In this regard, researchers make interpretations with the purpose of understanding human behaviour, attitudes, beliefs, and perceptions. This influences the methods that they choose. It makes sense that meaning can only be understood through the interaction between researcher and respondents. Thus the relationship between the researcher and the respondents is subjective in this paradigm.

Qualitative research is conducted within an interpretivist paradigm framework, but within the interpretivist paradigm any method would be considered acceptable, even quantitative procedures (Willis, 2007). The difference between them and the positivists is essentially in the way they analyse results from the research; essentially they start from the assumption that the results are always subjective, regardless of what method has been used, and results cannot be used to describe a uniform and standard reality (Willis, 2007). One of the limitations of interpretive research is that it abandons the scientific procedures of verification and, therefore,

results cannot be generalised to other situations. Another criticism of interpretivism is that the ontological assumption is subjective rather than objective. The strongest criticism of interpretivism is that it fails to acknowledge the political and ideological influences on knowledge and social reality (Mack, 2010).

4.2.2 *Positivism paradigm*

Positivism is an epistemological position which asserts that knowledge of a social phenomenon is based on what can be observed and recorded rather than on subjective understandings (Mathews and Ross, 2010). This 'scientific' research paradigm strives to investigate, confirm and predict law-like patterns of behaviour, and is commonly used in research to test theories or hypotheses. Positivists see the world as having one reality of which we are all a part (Quinlan, 2011). Within the positivist paradigm, researchers believe that there is an external reality and there are patterns and a sense of order in the world that can be discovered. Positivists believe that the world exists "out there" and thus the relationship between things can be measured. Evidence is collected through observations or experiments. Positivist researchers aim to avoid being biased by not allowing their own values and beliefs to interfere with the research (Bertram and Christiansen, 2014). Generally, its focus is on the objectivity of the research process.

Strengths of positivism lies with the fact that theory can be generalised to a larger degree, since data for the same issue with different social contexts can be collected. One can generalise a research finding when it has been replicated on many different populations and subpopulations; this is useful for obtaining data that allow quantitative predictions to be made (Johnson and Onwuegbuzie, 2004). Positivism also has the advantage that quantitative data often paves the way to further scientific research. Quantitative data provides objective information that researchers can use to make scientific assumptions (Johnson, 2014). The method is parsimonious which makes it useful for studying a large number of people, in a relatively short time (Cohen, Manion and Morrison 2007). There are some weaknesses found in empiricism and objectivity, namely, that they are not suitable in social phenomenon which tests human behaviour; excessive confidence in its claims to objectivity and empiricism do not stand up to scrutiny when used in both the social and natural sciences and thus it cannot be truly considered to work (Houghton, 2011). Empiricism is the theory that the origin of all knowledge is sense experience. It emphasises the role of experience and evidence, especially sensory perception, in the formation of ideas, and argues that the only knowledge humans can have is based on

experience (Mastin, 2008). Its further weakness is that it fails to take account of our unique ability to interpret our experiences and represent them to others (Cohen, Manion and Morrison, 2007:18). Lastly, Johnson (2014), laments that inaccuracy in scientific data is likely to alter the research results because the participants may choose random answers, not providing authentic responses yet the researcher has to abide by the findings anyhow. Thus, in positivist studies, new knowledge is generated by testing or confirming a theory through generalising the findings. Besides the traditional interpretive and positivist approaches to research, there has emerged an approach called post-positivist paradigm and positivism.

4.2.3 Post-positivism paradigm

According to Pickard (2013), the post-positivist paradigm combines both positivist and interpretive paradigms; it accepts that all discoveries are a responsibility of the researcher to demonstrate objectivity during the discovery process. Weaver and Olson (2006), pointed out that post-positivism has emerged in response to the realisation that reality can never be completely known and that attempts to measure it is limited to human comprehension. The authors further claimed that, consequently, methodological dualism in the use of qualitative and quantitative approaches is an accepted practice in a post positivist study. The post-positivist paradigm is considered a critical realism, where reality is viewed as complex and needs to be investigated by multiple measures since no one method is best. Turyasingura (2011), comments that, the realisation that neither of the paradigms can best explain reality to perfection, has given rise to a new type of thinking that has been labelled the post-positivism paradigm. Post-positivism paradigm situates itself between interpretative and positivism, which helps the researcher to use both approaches in a single study (Wiewiora, 2013).

The post-positivism paradigm challenges the positivist traditional notion that there is only one truth, an objective reality that exists independent of human perception (Phillips and Burbules, 2000). It postulates that there are many ways of knowing reality apart from scientific methods (Robinson, 2009). Within the post-positivist framework, reality is multiple, subjective, and mentally constructed by individuals (Crossan, 2003). In contrast, positivism is essentially the belief that the social world can be studied in the same way as the physical world. In other words, science is the only way to discover knowledge and this must be done in a value-free manner (Johnson and Gray, 2010; Mertens, 2010). A post-positivism paradigm was adopted in the present study, to allow the researcher to compare results and overcome limitations caused

by using one approach. A post-positivism paradigm allows the use of quantitative and qualitative approaches and it also allows the researcher to advance a theory by collecting data and confirm or rejecting the theory by examining the results (Phillips and Burbules, 2000; Chigada, 2014). The current study adopted the post-positivist paradigm in order to understand multiple participants' meanings, and attitudes to measure variables and generalise findings. The approach was used to uncover the true reality of the status of KS at EML. A number of studies have used the post-positivist paradigm to investigate KS in public organisations or in academic institutions and business organisation. These studies include those of Willem and Buelens (2007); Muchaonyerwa (2015); Mosala-Bryant (2015); Mkhize (2015); Maiga (2017) and Gorry (2008), among others. The advantage of using a post-positivism paradigm in this study allowed the theory to be tested and the results, generalised.

4.3 Research methods

Research method is a technique for gathering data and uses instruments such as a questionnaire, interview and observation and can be used with any research design (Becker and Bryman, 2004). A research method can either be quantitative or qualitative. The differences between the two lie in the nature of the data collected and method of analysis (Remler and Van Ryzin, 2011). Each method has its own strengths and weaknesses and should be seen as an option not competing with the other (Terre Blanche, Durrheim, and Painter, 2006). The choice between the two methods depend on the nature of the study and the type of data required.

4.3.1 Quantitative research

Stangor (2011), defines quantitative research as descriptive research that uses more formal measures of beliefs, attitudes, intentions, behaviour, including questionnaires, and systematic observation of behaviour that is subjected to statistical analysis. Creswell (2009), identifies the quantitative approach as one in which the researcher primarily uses positivist claims for developing knowledge (that is) cause and effect thinking, reduction to specific variables, and hypotheses and questions, use of instrument and observation, the test of theories. Creswell (2009), further claims that this approach also employs strategies of inquiry such as experiments and surveys and collects data on predetermined instruments that yield statistical data. According to Creswell (2014), the quantitative approach is used for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured with instruments so that numerical data can be obtained and analysed using statistical procedures. In this study, the quantitative research method measured how many people supported or did

not support certain issues or statements. The collected data were then statistically analysed and interpreted (Fidel, 2008). Moreover, the quantitative method facilitated the measurement of KS and effects of organisational culture and information communication technology on KS. Furthermore, the use of this method placed emphasis on quantification in the collection and analysis of data, which were expressed in numbers, percentages, and tables (Babbie, 2010). Research methods in a quantitative study include experiments, surveys, content analysis, and statistics (Neuman, 2011). Thus, this method enabled the researcher to summarise data by charts and numbers such as values and percentages.

The major attraction of the quantitative design is that it is the oldest type of research approach that can describe, predict and explain a research phenomenon (Locke, Silverman, and Spirduso, 1998). The strengths of this data analysis lie in its ability to arrange large amounts of confusing data in graphical form or numerical summaries, thus often satisfactorily answering research questions posed (Ngulube, 2009). A disadvantage of this method is that, there is little room for flexibility because of the prescribed procedures researchers have to follow. Moreover, Remler and Van Ryzin (2011), suggest that although quantitative studies are able to reveal the relationship that exists between two variables, they do not contribute much to our understanding of what is responsible for the relationship in the way that qualitative research methods can do.

4.3.2 Qualitative research

Morse and Richards (2002), argue that evidence of opportunities, experiences, beliefs, and challenges can be easily missed when only quantitative methods are used. Hence the use of qualitative research in this study was imperative to complement the quantitative method. Stangor (2011), defines qualitative research as descriptive research that is focused on observing and describing events as they occur, with the goal of capturing all of the richness of everyday behaviour. Maree (2012), claims that qualitative research is a method designed to scientifically explain events by using words and phrases and does not depend on numerical data to make conclusions. Qualitative research aims to explore sociological elements and describe reality as experienced by the respondents. This means that qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in the world (Merriam, 2009). Qualitative researchers study things in their natural settings, attempting to make sense of or interpret, phenomena in terms of the meanings people bring to them (Creswell and Miller, 1997). Chigada (2014),

pointed out that in quantitative research the questionnaire is the main data collection tool, whereas in qualitative research interviews, document analysis and observation are the main data collection tools. The data forming the basis of qualitative research includes field notes, audio or video recordings (Stangor, 2011) and is presented in narrative form which tries to capture the flavour of the natural setting (Ngulube, 2009). Qualitative research involves the use of qualitative data such as that collected by in-depth interviews, document and participant observation, and ethnography to understand and explain social and cultural phenomena (Ngulube, 2009). In this study, the researcher used interviews to gather qualitative data.

Qualitative research offers a number of advantages. It is unstructured and this offers flexibility to the researcher to probe respondents when a new and interesting issue comes up (Leedy and Ormrod, 2010). As indicated by Fidel (2008), the qualitative research method explores information in a qualitative form such as; explanations, descriptions, and narratives. Therefore, the qualitative research method afforded respondents in this study an opportunity to give their views by describing and explaining the situation as they understand it. Qualitative data helped the researcher determine the experiences and perceptions of the senior manager and district managers regarding KS in their library. This type of research is of specific relevance to the study of social relations (Flick, 2006), including KS as in this study. There are some disadvantages of the qualitative method. It is more subjective because it does not employ statistical analysis and may not fully maintain the neutrality of the researcher from the research process (Stangor, 2011). Other disadvantages are that data gathering techniques such as in-depth interviews are time consuming and associated with researcher bias. Therefore, the quantitative technique of using questionnaires compensated for this weakness of the qualitative technique (Dewah, 2012). The use of both methods in the study helped to improve the reliability and validity of the data collected and this culminated in the collection of a rich set of data.

The choice of philosophical underpinning must be consistent with the approach that is chosen for a research project. A post-positivist approach necessitates the triangulation of qualitative and quantitative methods or the use of a mixed methods approach. The use of qualitative and quantitative methods in a single study allows the generalisability of results by generating numeric descriptions, attitudes, and opinions of a population by studying a sample of that population (Babbie, 1990 and Creswell, 2009). A quantitative method has its roots in the post-positivist paradigm, as it allows the researcher to describe variables that determine the cause

and effect of relationships between variables (Mouton and Marais, 1989). A qualitative method, which is also aligned with the post-positivist paradigm allows for more probing and in-depth exploration of a particular view. A qualitative method allows the researcher to capture the insider perspective of those who are part of the investigation (Babbie and Mouton, 2001).

In the present study, the qualitative approach was used to gain a clear understanding of the extent to which knowledge is shared among staff at EML. The senior manager and district managers were interviewed. Furthermore, a quantitative research approach was applied to allow quantification of the variables under study (Bryman, 2006). The essence of collecting quantitative and qualitative data was to compare and contrast results from the questionnaires and interviews to obtain a rich set of data, thus enabling the researcher to develop complete and well-substantiated conclusions about the KS at EML. Data were collected through a survey using self-administered questionnaires via email and a structured interview schedule, with the intent of generalising from a population on variables that included factors that impact KS such as the organisational culture, the organisational structure, IT, trust, management/leadership styles, individual attitude and strategies for KS (Babbie, 1990).

The choice of quantitative and qualitative approaches in this study was informed by the fact that results from quantitative and qualitative approaches augment each other (Silverman, 2010). The idea of combining both approaches in a single study owes much to the past discussions about linking paradigms to methods and combining research designs in all phases of a study (Creswell, 2000). In recent times, research has emerged combining both methods (Lather, 2006). Many studies have accommodated the use of both quantitative and qualitative approaches with a single paradigm to explain variables of KS and KM (Mushi, 2009; Parirokh, Daneshgar and Fattahi 2008 and Chigada, 2014). Mushi (2009) clarified the importance of applying both these research methods for studying issues related to KS using a post-positivist paradigm.

4.4 Research design

The current study adopted a mixed methods research design, because quantitative and qualitative methods in isolation are insufficient to explore the complexity of the issue at hand: ascertaining to what extent eThekwini Municipal libraries are implementing KS practices, specifically with regard to knowledge creation and sharing. When quantitative and qualitative approaches are used in combination, in a mixed method approach they complement one another

and achieve a more comprehensive analysis (Ivankova, 2002; Williams, 2007). In support of this argument, Creswell (2009), states that, the biases inherent in each method cancel each other out with the mixed methods approach.

Venkatesh, Brown and Bala (2013), state that advocates of mixed methods research are conscious of the worth of both qualitative and quantitative paradigms to nurture a deeper insight into the phenomenon of interest. Leech and Onwuegbuzie (2009), claim that mixed methods research falls on a continuum from not mixed to fully mixed methods, with partially mixed designs occupying regions somewhere between the two. Ivankova (2002), argues that when devising a mixed methods study, concerns of implementation, integration, and priority need to be considered. Implementation means deciding and justifying how the qualitative and quantitative data collection and analysis will take place. Implementation of the combined approaches could consist of simultaneous, parallel or chronological collection and analysis of data. Ivankova (2002), further claims that the stage at which connecting and mixing qualitative and quantitative data takes place in the research process is referred to as integration. Priority relates to which research method, either the qualitative or quantitative research method, shall be given greater emphasis in the study.

This present study is basic research seeking to generate new knowledge regarding KS practices in public libraries: a case study of eThekwini Municipal Libraries. This study will use the mixed methods research design where both qualitative and quantitative data collection methods will be used. The main reason for adopting the mixed method was to be able to generate a complete picture, as this can be attained by using both research methods. Therefore, the objective of using both approaches in this study was to utilise the benefits of both these approaches. In the KM literature consulted in this study, both qualitative and quantitative approaches were used, as evident in the following studies: Ndakasharwa (2015); Maiga (2017); Andries (2016); Msomi (2015) and Mosala-Bryant (2015).

In the present study, the qualitative approach will be used to gain a clear understanding of the extent to which knowledge is shared among staff in public libraries. eThekwini Municipal Library district managers were interviewed. Questionnaires were distributed to the senior librarians, librarians and assistant librarians. The essence of collecting quantitative and qualitative data will allow for comparison of results from the questionnaires and interviews to

obtain a rich set of data, thus enabling the researcher to develop complete and well-substantiated conclusions about the KS practices at EML.

4.5 Population under study

The population of the study is that group or objects about which we want to draw conclusions. It usually refers to the specific cases that the researcher wants to study (Neuman, 1994; Babbie and Mouton, 2001). The population in this study consists of professional library staff working at EML. The libraries under study included all branch libraries from all districts within eThekwini Municipal as well as the technical services, reference library and departmental libraries. The target population consisted of professional library staff with a qualification in Library and Information Science (LIS). The respondents were from all library sections including acquisitions, branch libraries, departmental libraries, cataloguing and classification, systems and reference services. In this study a professional library worker is defined as a member of the library staff who is trained in LIS with a high qualification such as a Bachelor of LIS, or equivalent qualification such as Bachelor of technology (BTECH), Masters or doctorate, holding professional positions. Library staff include district managers, senior librarians, librarians and assistant librarians (Boone, 2003). At the time of conducting the study EML had 95 branch libraries which are located in different geographical areas within eThekwini Municipal and they are all run by professional library staff. These libraries are then grouped into districts.

Table 4.1 provides a summary of the population and indicates the number of districts that EML has where each district has one manager, senior librarians, librarians and assistant librarians. The table below illustrations the total population of all professional library staff at EML.

Table 4.1: Number of professional library staff at EML

Library	District manager	Senior librarian	Librarian	Assistant librarian
District 1	1	1	9	5
District 2 and District 3	1	1	15	5
District 4	1	2	9	3
District 5	Nil	1	10	2
District 6	1	2	5	2
District 7 and District 10	1	3	9	2
District 8	1	2	8	2
District 9	1	1	5	1
District 10	Nil	2	10	13
Technical services	1	3	10	3
Departmental libraries	Nil	1	3	Nil
New Centrum Library	2	Nil	1	Nil
Administration	1	Nil	Nil	Nil
Natural Science Museum	1	Nil	Nil	Nil
Durban Art Gallery	1	Nil	Nil	Nil
Local History Museum	1	Nil	Nil	Nil
Projects	1	Nil	Nil	Nil
TOTAL	**15**	**19**	**94**	**38**

(Source: EML administration officer 2019)

4.6 Sampling procedures

According to Cohen, Manion and Morrison (2011), there are two types of sampling strategies, namely, probability sampling and non-probability sampling. In probability sampling every member of the wider population has an equal chance of being included in the sample. In contrast, in non-probability sampling the chance of every member being selected from the wider population is unknown. The present study will use a census where all professional library staff members will be surveyed and interviews will be conducted with the senior manager and district managers, meaning that no sampling procedure was adopted. Creswell (2009), recommended the use of a census when studying the whole population. Conversely, Israel (1992), indicates that if the sample size is 200 or less it is advisable to conduct a census. He noted that conducting a census for a small population eliminates sampling error and provides data on all the individuals in the population. The total population of all professional library staff at EML was 168 at the time of conducting the current study and the researcher considered it appropriate to conduct a census as suggested by Israel (1992). The municipal's websites did not provide the relevant up-to-date information with regards to the number of professional staff

members available. The researcher contacted the administrative department within EML to obtain this information which will be used as the sampling frame to identify the respondents.

Professional senior librarians and librarians will be selected because they are the knowledge managers who assist in capturing and acquiring new knowledge, whereas the assistant librarians assist with library duties. Conducting interviews with top management such as the senior manager for libraries and heritage and district managers will assist the researcher to establish their roles and level of influence in KS.

4.7 Data collection procedures

Gaining access to the research site requires informing gatekeepers about the inquiry through a formal letter of request asking permission to the conduct research. The researcher should specify the nature of the research stating exactly what he or she will be doing on the site (Pickard, 2007). In this study a letter of request for permission to access the respondents at EML was sent to the senior manager and MILE offices. Before the researcher visited the research site, an appointment was scheduled through the principal clerks for managers.

This study used the mixed method design in order to determine KS practices of library staff working at EML. This study employed a survey research method for gathering data. Neuman (2006), lists the survey as the most widely used data collecting technique in the Social Sciences field. Qualitative data was obtained from senior managers and district managers by means of face-to-face or telephonic semi-structured interviews. Quantitative data were collected from the senior librarians, librarians and assistant librarians by means of self-administered questionnaires (surveys) administered online via email. The survey research design allows for the generalisation of the results to a wider group and it gives a true representation of the group under investigation. A survey research design is used to discover trends and patterns within the sample group that can be generalised to the defined population of the study (Pickard, 2007). The advantage of using a survey method is that it is wide in scope and it allows large quantities of data to be obtained from a large population located in different geographical areas. A survey method is also noted for its cost efficiency (Soper, Osborne and Zweizig, 1990). The survey method was cost effective and appropriate for collecting data for the study.

Data were collected through an amalgamation of structured interviews and survey questionnaires. This was the preferred method since addressing the research problem required

both quantitative and qualitative approaches. The interviews comprised a series of closed questions to procure specific information, and open ended questions to attain a depiction of the circumstances, and probing questions to discover a specific emphasis of direction or importance to the research area. The interviews were recorded to facilitate better data capturing and interpretation. The recordings and transcripts have been stored for the prescribed period of time to improve conformability of the study. The interviews were aimed at attaining descriptive and explorative experiences and perceptions of the participants, guided by the different themes examined in the literature review. The mapping of research questions to sources of data is reflected in Table 4.2.

Table 4.2: Mapping research questions to the research objective, instruments, and data analysis techniques

Research question	Research objective	Instruments	Data Analysis techniques
What was the extent of knowledge sharing at eThekwini municipal libraries?	Establish how library staff at EML practice knowledge sharing	Interview schedule Questionnaire	SPSS and thematic
What knowledge sharing practices were undertaken at eThekwini municipal libraries?	Establish how library staff at EML practice knowledge sharing	Interview schedule Questionnaire	SPSS and thematic
What was the attitude and perception of library staff towards knowledge sharing?	Investigate the challenges experienced by library staff members at EML	Interview schedule Questionnaire	SPSS and thematic
What were the challenges facing the library staff with regards to knowledge sharing?	Investigate the challenges experienced by library staff members at EML when sharing knowledge	Interview schedule Questionnaire	SPSS and thematic
What strategies could eThekwini municipal libraries use to overcome such challenges?	Assess the strategies EML could use to overcome such challenges	Interview schedule Questionnaire	SPSS and thematic

The survey questionnaires consisted of a few open ended questions intended to glean demographic information, while the balance was composed of closed questions to ensure consistency of the required information for statistical analysis at a later stage.

4.7.1 Survey questionnaire

A questionnaire is a collection of cautiously planned questions administered in precisely the same procedure to research participants in order to collect data about the topic of interest to the researcher (Jupp 2006). Wimmer and Dominick (2006), stated that a questionnaire is a printed document that contains instructions, questions and statements that are compiled to obtain answers from respondents. Many surveys use a self-administered questionnaire, where the questionnaire is administered to respondents either by mail or directly (Punch, 2003). The strength of using a self-administered questionnaire is that respondents can exercise their right of choosing not to respond and responses are expected to be anonymous and confidential. However, the limitations of a self-administered questionnaire were that the response rate may be low, people take their time to return the questionnaires and there is a lack of control over the nature of responses, resulting in bias, inaccuracies or incompleteness (Babbie and Mouton 2001). In this study an attempt was made to try to overcome these limitations by using multiple data collection methods.

Fowler (2014), states that the purpose of a survey questionnaire is to provide statistical estimates of the characteristics of a target population as well as perceptions of respondents regarding certain variables. Fowler (2014), further claims that a key advantage of the survey process is that by describing the sample of who actually completes the survey, one can describe the survey respondent demographics. However, Marshall (2004), points out a few hindrances to administering surveys. For instance, reaction rates from surveys tend to be exceptionally low and surveys are not the best vehicles for soliciting detailed written reactions. If there is confusion with regard to any of the survey questions, the researcher is not present to offer clarity to the respondent. In addition, the researcher cannot be completely certain that the survey was completed by the respondent for whom it was intended (Marshall, 2004).

According to Marshall (2004), the circulation and return of a survey questionnaire along with costs to be incurred by the researcher need to be measured when deciding on the method of administering data collection. However, Marshall (2004), suggests that if a survey is emailed to an entire study population, a huge geographical spread can be achieved, but reaction rates tend to be poor; if a survey is introduced to respondents independently however, a higher reaction rate is likely. Administering surveys to a group in one setting is an option, however this approach carries the danger of respondents being aware of each other's reactions and in this way tainting the responses (Marshall, 2004). Questionnaires can be posted on the web,

which has the potential to overcome many of the problems yet will nevertheless not be generally accessible to those without internet access. Additionally, if there are distinctive strategies used for diverse groups, it must be recognised if these will predisposition the outcomes (Marshall, 2004).

4.7.1.1 Advantages of a questionnaire

In this study, the use of questionnaire had the following advantages as stated by Kumar (2014):

- It is less expensive because the researcher did not have to interview the respondents face-to-face, and thus he/she saved time, human and financial resources. The use of questionnaires, therefore, is comparatively convenient and inexpensive especially when it is administered collectively to a study population.
- According to Mosala-Bryant (2015), anonymity is a very important factor in the public service; therefore, the researcher should choose an instrument which has a greater degree of providing this. Thus, the self-administered questionnaire permitted respondents to be more candid in responding to the questions (Nardi, 2006). Questionnaires offered greater anonymity in the present study since there was no face-to-face interaction between respondents and the interviewer because respondents completed questionnaires without the presence of the researcher.
- The responses were gathered in a standardised way, so questionnaires were more objective, certainly more so than face-to-face interviews.
- Generally, it was relatively quick to collect information using a questionnaire.
- Much information was collected from a large portion of a group (Kumar, 2014).

4.7.1.2 Disadvantages of a questionnaire

The use of the questionnaire was not without limitations. Some of the disadvantages encountered in this study are stated by Kumar (2014) and are as follows:

- Self-selecting bias. Since not everyone received a questionnaire, completed and returned it, possibilities are that there was a self-selecting bias. Those who returned their completed questionnaires might have attitudes, attributes or motivations that are different from those who do not.
- Questionnaires are standardised so it is not possible to explain any points in the questions that participants might misinterpret. This was partially solved by piloting the questions. The questionnaire was pre-tested by library staff members at Msunduzi

Municipal Libraries, the researcher has decided to use Msunduzi because Msunduzu is said to be the second biggest Municipal in KZN. The interview pilot was undertaken with the library manager and the questionnaires undertaken with principal librarians, senior librarians and librarian to determine their understanding of the items included in the questionnaire and also to incorporate any useful suggestions and recommendations that they made.

- Open-ended questions can generate large amounts of data that can take a long time to process and analyse. One way of limiting this would be to limit the space available to respondents so their responses are concise. Respondents may answer superficially, especially if the questionnaire takes a long time to complete. The common mistake of asking too many questions should be avoided.
- Respondents may not be willing to answer the questions. They might not wish to reveal the information or they might think that they will not benefit from responding and perhaps even be penalised for giving their real opinion. Respondents should be told why the information is being collected and how the results will be beneficial. They should be asked to reply honestly and be told that a negative response is just as useful as a more positive opinion.
- The response to a question may be influenced by the response to other questions. As respondents could read all the questions before answering, the way they answer a particular question might be affected by their knowledge of other questions.

4.7.2 Questionnaire design and layout

As advised by Kumar (2014) the layout of the questionnaire was such that it was easy to read and pleasant to the eyes and the sequence of the questions was easy to follow. According to Babbie (2010), a questionnaire should be spread out and uncluttered, therefore the researcher designed an attractive professional questionnaire that had boxes adequately spaced apart to persuade and encourage the respondent to complete it. The questions were clear and easy to understand because each question was preceded by clear, basic instructions to help the respondents understand and complete the questionnaire without problems (Babbie, 2010). The questionnaire for this present study contained pre-developed closed-ended items and a rating scale with pre-determined response options. The questionnaire also contained a few open ended questions. The rationale for using both closed and open-ended questions agreed with Neuman (2006)'s, argument that a total reliance on closed questions can distort results. By mixing the questions, the researcher was able to obtain both quantitative and qualitative data. Moreover,

the researcher was able to compensate for the disadvantages of closed questions with the advantages of the open ended questions and vice versa. The questionnaire comprised five sections. Section A covered respondents' Profile, Section B: Organisational Structure, section C: Knowledge management programmes, section D: Knowledge sharing and eThekwini Municipal Library governance and lastly section F covered: Recommendations. According to De Vos, Delport, Fouché, and Strydo. (2011), the covering letter is an integral part of the questionnaire. Thus, the researcher wrote a covering letter and attached it to the questionnaire. The covering letter outlined the nature of the study, the value of the respondents' participation and that participation was voluntary. This was followed by a consent letter form to be signed by those who agreed to participate in the study.

4.7.3 Interview schedule

According to Burns (1997), an interview is a vocal exchange, usually face-to-face, although the phone might be utilised, in which an investigator attempts to provoke information, theories or sentiments from another individual. An interview schedule is an investigation tool for gathering information. In this particular study, an interview schedule may be described as a composed list of closed questions organised by the investigator to be utilised in a direct interaction with the respondent in order to gather the required information (Kumar 2011). The interview schedule was used to collect data from the library senior manager and district managers in order to obtain an in-depth understanding and a clear picture of how KS was strategically planned and shared in public libraries at EML. Cohen, Manion and Morrison (2011), suggest that an interview may be used in conjunction with other for validation methods and to get more clarification from respondents and their reasons for responding as they do. Library senior management staff was selected because of their experience and knowledge about the organisation. Twelve interviews were conducted with senior management staff.

Several types of interviews exist and their use depends on the nature of the research topic and the type of data the researcher needs to collect (Pickard, 2007). An example is a structured interview, which is the type of interview in which an interviewer asks each respondent a series of pre-established questions (Pickard, 2007). The interview may elicit a fixed response or be in the form of a standardised open-ended interview. In this case, a structured interview with standardised open-ended questions was used, to allow senior management to give their own views. Face-to-face interviews were conducted to clarify questions which respondents did not

understand. Some of the questions asked during the interview were also asked in the self-administered questionnaire.

The structured interview schedule that was employed to collect qualitative data in this study was adapted from Moollan (2004) and Gaffoor (2008). Thereafter, the schedule was developed in the form of a standardised, open-ended interview. According to Patton (2002) and Pickard (2013), this form of interview allows the researcher to determine in advance the exact wording and sequence of questions, so that all interviewees are asked the same flexible questions, although they are offered the freedom to respond in their own words, they decide which information to share. This then facilitates the organisation and the analysis of the collected data (Patton 2002). The interview schedule was divided into sections: The introductory part of the schedule consisted of general questions, and then questions related to each of the following areas: knowledge management business processes, organisational structure; information and communication technology; organisational strategic plan questions and organisational culture questions and lastly KM systems. When deciding on an interview schedule, the researcher took into account the advantages of the interview schedule as pointed out by Kumar (2014).

4.7.3.1 Advantages of interviews

- Interviewing was useful for collecting more and in-depth information from the respondents, as there was no limited space like in the questionnaire.
- Information can be supplemented. As such the interviewer was able to supplement information obtained from responses with those gained from questionnaires.
- Questions could be explained. It is less likely that a question was misunderstood as the interviewer could either repeat a question or put it in a form that is understood by the respondent.
- The interaction between the interviewer and interviewee reduced the chance of the participant lying in their response.
-

4.7.3.2 *Disadvantages of interviews*

In this study, while collecting data through interviews the researcher encountered the following disadvantages:

- Time consuming and expensive. In this study the researcher had to reschedule the interviews due to continuous unavailability of managers.

- Through facial expressions, the interviewer noticed that some respondents refrained from expressing their real opinions or views. In such instances, the researcher reassured respondents that the answers they provide will remain anonymous and confidential.
- The fact that the researcher did not use a voice recorder, improper recording of answers and incomplete data was possible. The researcher asked respondents not to speak too fast in order to capture everything they were saying.

4.8 Data analysis strategies

Creswell and Clark (2011), state that mixed research methods use both qualitative and quantitative analytical techniques in a single study. Johnson and Christensen (2012), described how mixed methods data can be analysed concurrently or sequentially. Creswell and Clark (2011), suggest that concurrent data analysis, both qualitative and quantitative data are analysed at the same time. On the other hand, in sequential data analysis, qualitative and quantitative data are analysed separately at different times. In this study the data collected was organised, labelled, and analysed quantitatively and qualitatively the two approaches, (quantitative and qualitative), complemented each other and were used to generate different kinds of knowledge and also allowed for the comparison of data. The weaknesses of one approach could be covered by the strengths of the other and vice versa.

4.8.1 Quantitative data analysis

The computer software programme SPSS was used to analyse the quantitative data from the set of closed questions in the survey. SPSS is a computer software program that enables the input of raw data, modification, and re-organisation of data to carry out a wide range of simple, statistical analyses (Blaxter, Hughes and Tight 2006). A major feature of quantitative data analysis is coding (Cohen, Manion and Morrison, 2011), which reduces the time required to analyse data and reduces errors involved in analysing data. Results are clearly presented in SPSS, with in-depth statistics and charts (Pickard 2007). In the present study, the results of data analysis were presented in the form of tables, figures, charts, and verbal descriptions.

4.8.2 Qualitative data analysis

Qualitative data was analysed using thematic analysis, which is a descriptive presentation of this type of data (Anderson, 2007). Qualitative data was collected using interviews and open-ended questions from the survey questionnaire were also analysed. Qualitative data analysis is

done by arranging data, which includes text or phrases, then organising and summarising the data into ideas via a procedure of coding, and finally presenting the data in figures, tables, or a discussion (Creswell 2007). Creswell (2009), points out that data obtained by qualitative methods are voluminous, and thus, the data needs to be reduced by identifying a coding procedure that placed and summarises information into themes or categories. The analysed qualitative data was organised and presented according to the research questions and brought together in such a way as to preserve the coherence of the content (Cohen, Manion and Morrison 2011). The presentation of qualitative data involved the discussions of themes and categories.

4.9 Validity and reliability of data collection instruments

Validity and reliability are used to judge the quality of all standardised quantitative measures. Several major steps were carried out to enhance reliability and validity of the data collected.

4.9.1 Validity

Vithal and Jansen (2010), describe validity as an endeavour to check out if the significance and understanding of an event is complete or if a certain evaluation is a precise indication of what you aim to discover. Lodico, Spaulding and Voegtle (2010), pointed out that validity focuses on ensuring that what the instrument claims to measure is truly what it is measuring thus showing that the instrument is accurate. Brayman (2012), articulates that validity is the issue of whether an indicator that is planned to test a concept really measures that concept. The goal of measurement validity is to ensure that instruments, such as questionnaires, consistently and reliably measure something (Giddings and Grant, 2009). Creswell and Clark (2011), state that achieving validity in mixed methods research involves using strategies that address potential issues in data collection, data analysis and the interpretations that might compromise the integration of the quantitative and qualitative methods of the study and the conclusion drawn from the mixture. Lodico et al. (2010), pointed out that in order to have value the instrument must have sound reliability and validity. Therefore, it is imperative for the researcher to select the most appropriate and accurate instrument as a measurement tool for the study. Generally, validity is used in two contexts: evaluating the quality of a measurement instrument or method, and evaluating the quality of a research study (Gabrenya, 2003). There are several measures of validity. Internal and external validity relate to the overall study design; while content validity, criterion validity and construct validity assess the validity of data collection tools.

4.9.1.1 Content validity

According to Fraenkel and Wallen (2009), content validity as its name implies, explores how the content of the assessment performs. In order to determine content-related validity the researcher is concerned with determining whether all areas or domains are appropriately covered within the assessment. Furthermore, it deals with how the assessment is designed, for example the size of the font, sufficiency of work space for learners, correct language usage and clarity of instructions (Fraenkel and Wallen, 2009). The survey questionnaire items were edited to suit the study in order to determine content validity, which determines the adequacy of the characteristics in describing the study. The researcher ensured that the research questions aimed to be answered by the study were thoroughly covered in both data collection instruments. Content validity refers to the level at which the objects assess the content they were planned to assess.

4.9.1.2 Construct validity

Construct validity refers to the degree to which a measurement technique uncovers the information which it was designed to uncover (Brynard, Hanekom, and Brynard, 2014). To meet this criterion, the researcher ensured that questions in the questionnaire were specifically designed to largely obtain quantitative data, while questions on the interview schedule were designed to largely obtain qualitative data through open and closed ended questions. The researcher standardised the data collection instruments by comparing and contrasting them with the relevant literature review. It was also important to ensure that the data collection instruments successfully identified the precise effective measures for the theories being explored. Construct validity focuses on finding effective measures for the theories under investigation (Yin 1994). In more recent studies, construct validity has become the overriding objective in validity, and it has focused on whether the scores serve a useful purpose and have positive consequences when they are used in practice (Hubley and Zumbo, 1996). Establishing the validity of the scores in a survey helps to identify whether an instrument might be a good one to use in survey research.

4.9.1.3 Criterion-related validity

Koonin (2014), defines criterion-related validity as the extent to which a test accurately predicts future behaviours. Whereas, Drost (2011), describes criterion validity as the degree of correspondence between a test measure and one or more external criteria, usually measured by their correlation Concurrent and predictive validity are both measures of criterion validity.

Twycross and Shields (2004), is of the view that concurrent validity uses a pre-existing and well-accepted measure against which the new measure can be compared. Predictive validity measures the extent to which a tool can predict a future event that is of interest. Criterion validity is usually measured using a correlation coefficient and the tool can be considered valid when the correlation is high (Twycross and Shields, 2004).

To ensure content and criterion validity the research tools in this study were reviewed by fellow master's student colleagues in order for them to assess if the questions were clear enough and whether the line of questioning would measure what it was designed to measure. In addition, the researcher's supervisor reviewed the data collection tools; questionnaire items were adapted from similar previous studies, where the scale items were found to be valid.

4.9.1.4 Internal validity

Twycross and Shields (2004), refers to internal validity as the extent to which the design of a research study is a good test of the hypothesis or is appropriate for the research question. Internal validity is achieved when the operationalisation of the independent variable has construct validity which means what the theory says it should mean. Gabrenya (2003), contends that the operationalisation of the dependent variable has construct validity if the independent variable is clearly responsible for the observed change in the dependent variable and the dependent variable's relationship to the independent variable cannot be explained in some other way.

4.9.1.5 External validity

External validity relates to whether or not research findings can be generalised beyond the immediate study sample and setting (Twycross and Shields, 2004). Drost (2011) asserts that external validity of a study or relationships between variables implies the ability to generalise to other persons, settings, and times. Generalising to well-explained target populations should be clearly differentiated from generalising across populations. Gabrenya (2003), points out that a valid quantitative research study should be, generalisable to other similar target populations, measures, times, and places provided that the sample used is sufficient. This is because quantitative research is undertaken to build and test theories and models; a quantitative study that works only with a certain kind of sample and has only one way of operationalising each construct is not very useful when it comes to generalisation. In this study, for example, the constructs of KS and knowledge creation were operationalised in more than one way.

4.9.2 Reliability

Lodico, Spaulding and Voegtle (2010), describe reliability as the consistency of scores, that is, the ability of the instrument to produce approximately the same score for an individual over repeated testing. Mangal and Mangal (2013), claim that reliability refers to the dependability that can be imposed in a pre-test and can be demonstrated through the consistency and stability of its measures. Fowler (2002), asserts that one way to ensure reliability is for the researcher to do a pilot study to measure the range of opinion and ideas peoples have in the study for the purpose of testing the instruments.

Reliability (trustworthiness) of the data collection tools were achieved by making sure that the instruments measure the constructs of interests (Bryman, 2012; Powell, 1985). The questionnaire and interview schedule was pre-tested by members of library staff at Msunduzi Municipal; the researcher decided to change from uMhlathuze because it a smaller municipal than Msunduzu and is the second biggest Municipal in KZN. The pilot study was done to identify vague, unacceptable questions and to test the consistency of results. The interview pilot was undertaken with the library manager and the questionnaires undertaken with the principal librarians, senior librarians, and librarian to determine their understanding of the items in the questionnaire and to incorporate any useful suggestions and recommendations that they made.

Table 4.3 illustrates the total number of all professional library staff at Msunduzi used to pre-test the data collection instruments.

Table 4.3: Number of professional library staff at Msunduzi Municipal Libraries.

MSUNDUZI LIBRARAY	Library manager	Principal librarian	Senior librarian	librarian
	1	2	8	15

4.10 Ethical consideration

According to Maree and van der Westhuizen (2007), it is important for researchers to highlight the ethical considerations arising from their research studies. To ensure that a study's ethical standards are maintained, researchers should conduct an ethical assessment (Bless, Higson-Smith and Sithole 2013). Gravetter and Forzano (2016), contend that considerations of ethical issues in research are important throughout the research process in order to avoid collisions

between the researcher and participants. Ethical considerations were undertaken with regard to university protocols and with regards to participants in both the qualitative and quantitative components of the study. Permission to conduct the research was received after a research proposal was submitted, reviewed by the University of KwaZulu-Natal's Social Sciences and Humanities Research Ethics Committee. Written consent to conduct research within the eThekwini Municipal Libraries was obtained by the researcher after having submitting her study to MILE. Under the close guidance of the researcher's supervisor, the researcher created the survey questionnaire by adapting a similar line of questioning to that used in other studies on KM in relation to knowledge creation and sharing. Both the survey questionnaire and interview questions were reviewed by the University of KwaZulu-Natal's Social Sciences and Humanities Research Ethics Committee and returned without any queries or concerns.

Fieldwork did not commence until clearance was issued by the Social Science and Humanities Research Ethics Committee. The study was conducted in terms of the University of Kwa-Zulu Natal's research ethics policy. The researcher gained permission from various authorities at the municipal where the study was to be conducted. Institutional gatekeepers' letters granting permission to conduct research were sent to the relevant people. Respondents were notified that participation is voluntary and they are free to withdraw from the study at any time. Participants were given a consent form to sign that indicated that they gave consent for the data to be gathered and that they understood how it will be used. Assurance was given to the participants that data will be kept confidential and will not be released after research for any other purpose or use without approval from the participants.

Table 4.4 Research schedule (work plan/ time-frame)

Month/Year	Description	Outcomes
May 2017	Submission of proposal for review	Final proposal revised and to be presented
June 2017	Proposal presentation to the cluster Ethical clearance Request gatekeepers permission to do the study from EML Work on research instruments Start chapter one	Submit first chapter
2018	Distribute questionnaire to respondents Conduct interviews with respondents Start chapter two	Submitted chapter two
2018	Make follow up with respondents Start chapter three	Submitted chapter three
2018	Final follow up with respondents Start chapter four	Submitted chapter four
August –October 2019	Combination of respondents answers and analysing the content	Getting research results
November- December 2019	Analysing and interpretation of research results	Finalised research results and submitted first draft of research project
April –May 2020	Attending to corrections and finalising research report	Submitted final research project

4.11 Chapter summary

Chapter Four described the research methodology used in the study. The post-positivist paradigm was used to underpin the study. The study used a mixed method approach combining

quantitative and qualitative approaches. The chapter discussed the study population, and census. Furthermore, the study used a questionnaire and semi-structured interviews to collect quantitative and qualitative data, respectively. Quantitative data was analysed using SPSS to generate descriptive data while qualitative data was analysed thematically and presented in narrative description. Validity and reliability of data was assured through a pilot study at Msunduzi Municipal libraries. Ethical considerations were ensured through compliance with UKZN research ethics policy.

CHAPTER FIVE: DATA ANALYSIS AND PRESENTATION OF FINDINGS

5.1 Introduction

The previous chapter discussed the, research paradigm, research methods, research design, population under study, sampling procedures, data collection procedures, data analysis strategies, validity and reliability of data collection instruments, ethical considerations and instruments used. This chapter presents and analyses data collected from the respondents. This study used both quantitative and qualitative methods to collect and analyse data. The researcher used, figures, tables and explanations to analyse and organise data into simpler accounts. Perron and Gillespie (2015), state that the purpose of data analysis and presentation of findings in research is to summarise the information collected to formulate an answer to the research questions. Grinnell and Unrau (2011), assert that data analysis is aimed at sifting, sorting and organising masses of data acquired during data collection into a meaningful way which address the original research problem that has been identified.

The main objective of the study was to investigate KS practices in public libraries of eThekwini Municipal. The study sought to address the following research questions:

- What was the extent of knowledge sharing at EML?
- What knowledge sharing practices were undertaken at EML?
- What was the attitude and perception of library staff towards knowledge sharing?
- What were the challenges facing the library staff with regards to knowledge sharing?
- What strategies could EML use to overcome such challenges?

A mixed method approach was applied in this study as questionnaires and semi-structured interviews were used to collect data from EML employees. The study was underpinned by the SECI model. The post-positivist paradigm was applied with quantitative and qualitative approaches.

5.2 Overall target population (N=166)

Bryman (2012), stated that the acceptable response rate to questions should be at least 60%. Rubin and Bellamy (2012), suggest 50% as the acceptable level of response. In the present study the response rate for questionnaires was 94.7% and the response rate for interviews was 80% making the response rate acceptable for analysis. A survey questionnaire was

administered to 151 professional library staff, which consisted of senior librarians, librarians and assistant librarians from which 143 were completed and returned, yielding a good response rate of 94.7%. Interviews were conducted with 12 district managers of the 15 that were targeted, yielding a response rate of 80%. According to Babbie and Mouton (2001), a response rate of more than 70% is considered acceptable. The overall target population included 166 individuals; the breakdown of employees is tabulated in Table 5.1.

Table 5.1: Overall target population (N=166)

Target population	Sample size	Percentage
District manager	N=15/166	9%
Senior librarian	N=19/166	11%
Librarian	N=94/166	57%
Assistant Librarian	N=38/166	23%
Total	166	100%

(Source: Field Data, 2019)

5.2.1 Response rates for all categories of respondents (N=155/166)

The response rates for all categories of respondents are tabulated in Table 5.2. Only 12 (80%) district managers were interviewed out of 15 that currently hold this position at EML. Out of 19 questionnaires distributed to senior librarians, a total of 18 were returned, yielding a response rate of 94.7%. Eighty-eight (93.6%) questionnaires were returned by librarians out of 94 that were distributed. Thirty-seven (97.4%) were returned by assistant librarians out of 38. The overall response rate was 155 (93.4%) out of 166.

Table 5.2: Response rates for all categories of respondents (N=155/166)

Category	Responses	Percentage
District manager	12/15	80%
Senior librarian	18/19	94.7%
Librarian	88/94	93.6%
Assistant librarian	37/38	97.3%
Total	155/166	93.4%

(Source: Field Data, 2019)

5.3 Questionnaire result

The questionnaire was circulated to professional library employees at EML. The survey questionnaire was categorised into the following five categories: Section A: Demographic profile, Section B: The extent of knowledge sharing practices at EML, Section C: Factors

affecting knowledge sharing, Section D: Attitudes and perceptions of staff towards knowledge sharing and Section E: Challenges with knowledge sharing.

5.3.1 Section A: Demographic profile section

This section of the questionnaire intended to determine the background information of the respondents in order to understand better whether or not the practice of KS at EML is associated with the employee's gender, designation, qualification, length of service, or the section in which he or she works. A survey questionnaire was distributed to EML professional library staff which included 18 senior librarians, 88 librarians and 37 assistant librarians. Respondents were asked to indicate their age, gender, work experience, race, qualification, and their position.

5.3.1.1 Gender of respondents

The survey questionnaire yielded 143 (94.7%) complete responses. From the 143 complete responses, 54 (37.8 %) of the respondents were males and 89 (62.2%) were females. The results show that at EML, there were more female employees than male. According to Lin (2008), men-women relationships in the workplace influence the way in which KS is interpreted. Knowledge sharing may fail when a team is primarily comprised of one gender since employees in the gender minority may be less likely to share knowledge freely (Andries, 2016). Even though the results show that there were more female respondents than male, there was a satisfactory balance of gender distribution at EML which means there is a good chance of KS.

5.3.1.2 Age of respondents

Respondents were asked to indicate their age group. Andries (2016), suggested that employees' age has an impact on the willingness of employees to share knowledge. Riege (2005), argues that the more age-compatible the team members the more likely they will engage in effective KS. The results in Table 5.3 show that the respondents' ages ranged from the 20s to over 45 years; with 42(29.4%) over the age of 45.

Table 5.3: Age group of respondents (N=143)

Age	Frequency	Percentage
18-25	0	0%
26-30	20	14%
31-34	30	21%
35-39	20	14%
40-45	31	21.6%
Over 45	42	29.4%
Total	143	100%

(Source: Field Data, 2019)

Twenty (14%) respondents' age ranged from 26 to 30 years, and 30 (21%) ranged from 31 to 34 years. Most of the respondents 42 (29.4%) were over 45 years while 31 (21.6%) ranged from 40 to 45 and 20 (14%) raged from 35 to 39. The group over 45 probably possesses vast experience due to their long service. This could suggest that EML has older employees to share knowledge with younger employees and that younger employees should be willing to learn from older employees. On the contrary, sometimes older employees may not be willing to share knowledge because of fear of younger employees becoming threats to their positions in the organisation. On the other hand, younger employees may also not be willing to learn from older ones (Bratianu and Orzea, 2011). The 18 to 25 age range had a 0% response, this was due to the fact that there were no library staff 25 years and younger.

According to Muchaonyerwa (2015), younger employees are leaving the library to look for better positions and promotion elsewhere, resulting in knowledge loss from an organisation. This may be caused by the lack of opportunities for promotions, low salaries, and lack of motivation in their current organisations. Mohammad, Hamdeh and Sabri (2010), confirmed that many organisations are finding it difficult to retain knowledge assets, since many experts are leaving for opportunities elsewhere.

5.3.1.3 *Race of respondents*

For statistical purposes, respondents were asked to indicate their race. As shown in Table 5.4 the majority of employees at EML who participated in the survey were black, 99 (69.23%), followed by Indians 32 (22.37%) and lastly whites 12 (8.4%). This could also be linked with employment laws such as the Equity Act. There were no Coloured respondents.

Table 5.4: Race of respondents N=143

Race	Frequency	Percentage
Black	99	69.23%
Indian	32	22.37%
White	12	8.4%
Coloured	0	0%
Total	143	100%

(Source: Field Data, 2019)

Rivera-Vasquez, Ortiz-Fournier and Flores (2011), state that it is important to recognise that the identity of people influences meaningfully the will to share knowledge within the organisations. The authors further suggest that human beings behave in ways that are different and predictable depending on the situation and their respective social identities. Social identities refer to the social categories to which one believes one belongs. That means that race may affect KS positively or negatively. Race may impact positively, by facilitating communication between employees. However, these racial differences may also inhibit knowledge transfer and as a result, deter success in the organisation. In the present study a majority of the respondents were in the black racial group which might suggest that KS at EML is likely to be effective. Different race groups may imply different cultural backgrounds (Rivera-Vasquez, Ortiz-Fournier and Flores, 2011).

5.3.1.4 Number of years working at EML

Respondents were asked to indicate the number of years of service at EML. The intention of this question was to identify the probable practical experience employees possessed and thus indicate knowledge gained through experience since it was assumed to be related to the years they spent at the municipal. Table 5.5 below reveals the breakdown with regard to the respondents' period of work experience at EML.

Table 5.5: Number of years working at EML (N=143)

Years	Frequency	Percentage
Less than a year	0	0%
1-2 years	6	4.1%
3-4 years	18	12.6%
5-10 years	40	28%
More than 10 years	79	55.3%
Total	143	100

(Source: Field Data, 2019)

The highest portion of respondents, 79 (55.3%), had worked at EML for more than 10 years. The second largest range of years of service at EML was 5 to 10 years for 40 (28%) of the respondents. The lowest frequency was found with employees who had worked at eThekwini Municipal Libraries for 1 to 2 years, with only six (4.1%) respondents. The second lowest range was 3 to 4, which had 18 (12.6%) respondents. The study had a zero (0%) response rate from employees who worked for less than a year. According to Andries (2016), one may assume that employees with fewer years had less experience. Conversely, those with longer periods of service had more experience and organisational knowledge worth sharing. Connelly and Kelloway (2003), state that experienced employees may simply be able to share their knowledge because they know more of the right people in the organisation.

5.3.1.5 Highest educational qualifications of respondents

Respondents were asked to indicate their academic qualifications. This question aimed to identify the highest qualification/s of the employees at EML.

Table 5.6: **Highest educational qualifications of respondents (N=143)**

Highest qualification	Frequency	Percentage
Matric/Grade 12	0	0%
National Diploma	16	11.18%
Bachelor's degree	92	64.33%
Honours	3	2.1%
Master's degree	2	1.39%
PhD	0	0%
BTECH	30	21%
Total	143	100%

(Source: Field Data, 2019)

As indicated in Table 5.6, of the 143 completed responses, the majority, 92 (64.33%), held a Bachelor's degree. Thirty (21%) of the respondents held a Bachelor of Technology. The difference between the two is that the Bachelor's degree is obtained from a traditional university such as the University of KwaZulu-Natal whereas the Bachelor of Technology was obtained from a university of technology such as the Durban University of Technology. The least number of respondents three (2.1%), held a Master's degree followed by two (1.39%) respondents who held an honours degree. From the remaining respondents, 16 (11.18%) had a National Diploma. The results show a zero (0%) response rate from respondents who held a Matric/ Grade 12 and those who held a PhD as their highest qualification. In the present study all respondents were qualified to provide the researcher with relevant information for the study.

5.3.1.6 Sections respondents currently working in

Respondents were asked to indicate what section in which they currently work at EML. The aim of this question was to identify the different sections at EML. The results shown in Table 5.7 reflect that the branch libraries 121 (84.65%) had the largest number of employees who participated in the study. The reason could be the fact that branch libraries had the largest number of employees than any other section at EML.

Table 5.7: Sections respondents currently working in N=143

Sections respondents currently working under	Frequency	Percentage
Branch libraries	121	84.6%
Technical services	16	11.2%
Departmental libraries	2	1.4%
Reference library	4	2.8%
Total	143	100%

(Source: Field Data, 2019)

Table 5.7 above shows that the departmental libraries had the lowest response rate of two (1.4%) followed by the reference library with four (2.8%) given that they have the lowest number of staff compared to other sections at EML. Technical services had the second highest number of responses with 16 (11.2%) respondents.

5.3.1.7 Positions held

Respondents were asked to indicate the position they held at the time of the study. The table below shows that a majority of the respondents were librarians 89 (62.25%).

Table 5.8: Positions held by respondents (N=143)

Positions of respondents	Frequency	Percentage
Senior librarian	18	12.6%
Librarian	88	61.5%
Assistant librarian	37	25.9%
Total	143	100%

(Source: Field Data, 2019)

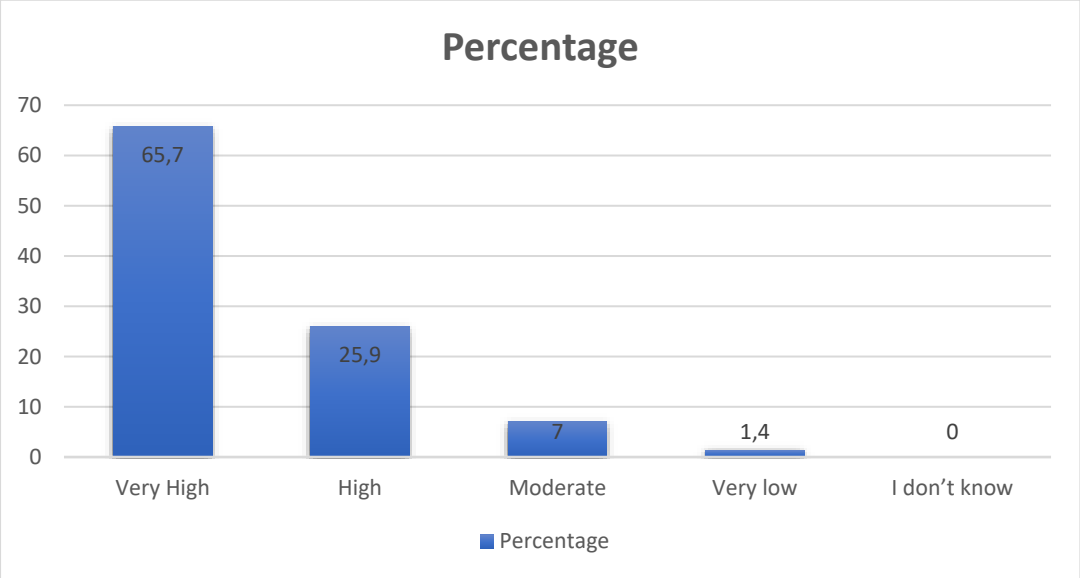
Table 5.8 above indicates that the majority of the respondents, 88 (61.5%), currently held the position of librarian at the time of the study. Thirty-seven (25.9%) of the respondents were assistant librarians and 18 (12.6%) were senior librarians. Andries (2016), stated that the levels or the positions of and individual in an organisation play a role in KS.

5.3.2. Section B: The extent of knowledge sharing practices at EML

This section deals with the extent of knowledge sharing practices at EML. This section covers the main objective of the study which was to investigate KS practices in the public libraries of the eThekwini Municipal.

5.3.2.1 Impotence of knowledge sharing at EML

In this questionnaire, a multiple response question asked, respondents to rate the importance of KS at eThekwini Municipal Libraries according to a scale of categories ranging from 'very high' to 'very low' including the catch-all phrase of 'I don't know'.



(Source: Field Data, 2019)

Figure 5.1: The importance of sharing knowledge at EML (N= 143)

Figure 5.1 above indicates that 94 (65.7%) of respondents rated the importance of KS as very high whilst 37 (25.9%) respondents rated it as high. Ten (7%) of the respondents rated the importance of KS as being moderate and two (1.4%) as very low with zero (0%) indicating they did not know.

5.3.2.2 *Organisational culture and knowledge sharing*

The respondents were asked in question 9 if the organisational culture at EML promotes KS and experiences. According to Maiga (2017), the knowledge sharing model considers organisational culture as an enabler for the transfer, creation, and sharing of knowledge. Of the respondents, 126 (88%) answered yes, 26 (9.8%) said no, and three (2.1%) indicated that they did not know. Of the 126 (88%) who indicated that the organisational culture at EML promotes

KS among employees, 62% of the respondents were females, while 64% of the respondents held a Bachelor's degree, and 55% had worked in the municipal for over 10 years. However, 14 (10%) maintained that EML did not promote a culture of KS among employees; while three (2%) did not know.

5.3.2.3 EML involvement in knowledge creation and sharing

The survey questionnaire also explored whether EML was involved in knowledge creation and sharing. Twenty-nine (20%) of the respondents said EML was not involve in knowledge creation and sharing. Six (4%) stated they did not know and 108 (76%) argued that EML was involved in knowledge creation and sharing. To attain more insight, all 'yes' responses were disaggregated by gender, educational level and work experience. It was found that the majority of the affirmative responses (67.6%) were from females. With regards to educational levels, 57.4% of affirmative responses were from those with a Bachelor's degree qualification; and when it came to work experience, 46.3% had worked for more than 10 years.

5.3.2.4 Diverse membership at EML and its impact on knowledge sharing

In question 11 respondents were asked to indicate if the diverse membership involving senior and junior management at EML encouraged KS. Of the 143 (100%), 91 (64%) indicated that EML encourages KS among the diverse membership of management in the organisation. However, 33 (23%) maintained EML does not do so; while 19 (13%) did not know.

5.3.2.5 Resources and facilities for individual development at EML

Sixty-nine (48.3%) respondents said that resources and facilities for individual development were not available to all levels at EML. On the other hand, 50 (35%) said they were available, while 24 (16.8%) did not know. Of those, 25.9% of those who affirmed were males. Again, from those who responded 'yes' 23.3% held a Bachelor's degree and 29.4% had worked for the municipal for 5 to 10 years.

5.3.2.6 Staff responsible for spearheading knowledge sharing at EML

Question 13 sought to understand whether there were staff responsible for spearheading KS at EML.A majority of the respondents, 69 (48.3 %) indicated that there were designated staff for promoting KS. On the other hand, 47 (32.9%) said there were no staff responsible for

promoting KS. Another 30 (21 %) responded that they did not know whether there were staff responsible for promoting knowledge sharing.

5.3.2.7 Knowledge sharing policy at EML

With regards to the extent of KS practices at eThekwini Municipal Libraries, question 14 sought to establish whether EML had a KM and sharing policy in place to help guide KM and sharing. A majority, 104 (72.7%) of the respondents indicated that they did not know if there was a KS policy at EML. Twenty-four (16%) agreed that there was a policy and 15 (10.5%) did not agree to there being a policy for KM and KS at EML.

5.3.3 Section C: Knowledge sharing practices at EML

This section deals with the first objective of the study. This section also provided the respondents with statements related to KS practices at EML. Respondents were asked to specify whether they strongly disagreed (SD), disagreed (D), agreed (A), were neutral (N) or strongly agreed (SA) with the listed statements.

5.2.3.1 Approaches used at EML to ensure knowledge sharing and acquisition of relevant skills

Question 15 sought to solicit respondents' views on the approaches used to generate KS and acquisition of relevant skills at EML. Table 5.9 summarises responses on how many respondents agreed, disagreed or were neutral to the general statements.

Table 5.9: Approaches used at EML to ensure knowledge sharing and acquisition of relevant skills. (N=143)

Statements	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral
Staff gain new ideas through social gatherings such as departmental meetings, mentoring etc.	0 (0%)	0 (0%)	29 (20.3%)	104 (72%)	10 (7%)
Staff improve their knowledge by learning from other organisations and institutions	14 (9.8%)	35 (24.5%)	8 (5.6%)	17 (11.9%)	69 (48.3%)
Individuals are committed to professional development	8 (5.6%)	12 (8.4%)	20 (14%)	60 (42%)	43 (30%)
Seminars, workshops, training and development are held periodically and adequately to help gain new knowledge	2 (1.4%)	0 (0%)	33 (23.1%)	88 (61.5%)	20 (14%)

(Source: Field Data, 2019)

One hundred and four (72%) of the respondents agreed that staff members at EML gained new ideas through social gatherings. In addition, 88 (61.5%) reflect that the library staff members improve KS by attending seminars, workshops, training and development programs held periodically by the municipal. A majority of the respondents were positive when it came to the statements measuring individuals' commitment to professional development 60 (42%) agreed and 43 (30%) were neutral. Sixty-nine (48, 3%) of the respondents were neutral on staff improving their KS by learning from other organisations, this may indicate that staff members are not aware of this practice taking place in the municipal. Findings from the respondents surveyed showed that there were approaches used at EML to ensure KS and acquisition of relevant skills.

5.3.3.2 Channels of communication used for knowledge sharing at EML

Respondents were asked in question 16, which of the channels of communication they preferred to use for KS. Statements discussing preferred channels for KS are provided in Table 5.10.

Table 5.10: Channels of communication used for knowledge sharing at EML (N=143)

Statement	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral
When I want to share knowledge, I prefer using social networks such as, Facebook, Twitter, wikis and library blog.	2 1.4%	2 1.4%	74 51.7%	50 35%	15 10.5%
I use the intranet and knowledge repositories to share knowledge with my co-workers	24 17%	6 4.2%	50 35%	54 37.8%	9 6%
I use videoconferencing to share knowledge with my co-workers	125 87.4%	15 10.5%	1 0.7%	0 0%	2 1.4%
I prefer to share knowledge through storytelling.	0 0%	1 0.7%	68 48%	18 12.6%	56 39%

(Source: Field Data, 2019)

The findings were that 54 (37.8%) library staff indicated that they preferred sharing knowledge using the using intranet and knowledge repositories with co-workers. In addition, 68 (48%) showed interest in sharing knowledge through storytelling and 74 (51.7%) by using social networks such as Facebook, Twitter, wikis and library blogs. One hundred and twenty-five (87.4%) did not perceive video-conferencing as a useful channel for sharing knowledge with co-workers. Msomi (2015), employed a case study strategy for eThekwini Metropolitan

Municipal and six municipal units/departments as units of analysis. Findings in this study show that the municipal emphasised formal and informal social learning as an important medium for knowledge creation and sharing.

5.3.3.3 Ways to encouraging knowledge sharing at EML

Table 5.11 provides the summary of the statements giving respondents' views about ways to encourage KS at EML. This was asked of respondents in question 17.

Table 5.11: Ways to encourage knowledge sharing at EML (N=143)

Statement	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral
Knowledge sharing can become a culture in the organisation if top management regularly displays and reinforces the theme that knowledge is the lifeblood of an organisation	0 0%	0 0%	59 41.3%	84 58.7%	0 0%
Non-monetary rewards and incentives shall be more effective in encouraging knowledge sharing.	1 0.7%	27 18.9%	43 30%	47 32.9%	25 17.5%
Knowledge sharing can be encouraged if it is linked with the performance appraisal of the staff	1 0.7%	2 1.4%	69 48.2%	39 27.3%	32 22.4%
Knowledge sharing can be encouraged if there is a policy which promotes job rotation among employees	1 0.7%	1 0.7%	65 45.4%	76 53.2%	0 0%
Knowledge sharing can be encouraged through staff development and providing adequate resources	1 0.7%	0 0%	49 34.3%	88 61.5%	5 3.5%

(Source: Field Data, 2019)

Respondents were asked to state their opinions concerning ways in which they thought KS can be encouraged at EML. Very strong support was observed for promoting KS by top managers within the municipal, 48 (58.7%) of the respondents stated that KS can become a culture at EML if top management regularly displays and reinforces the theme that 'knowledge is the lifeblood of an organisation'. The highest percentage 88 (61.5%) respondents felt that KS can be encouraged through staff development and providing adequate resources. In addition, 76 (53.2%) of the respondents were positive that KS can be encouraged if there is a policy which promotes job rotation among employees. This result suggests that staff would be more willing

to share knowledge if a policy was introduced, while, 69 (48.2%) emphasised linking KS with performance appraisal of staff, 43 (30%) of the respondents stressed the use of non-monetary rewards as a way of encouraging KS.

5.3.4 Section D: Attitudes and perceptions of staff towards knowledge sharing at EML

This section sought to address the attitude and perception of library staff towards KS. The broader objective was to assess the extent to which knowledge was shared at EML.

5.3.4.1 Attitudes and perceptions of library staff towards knowledge sharing at EML

Statements addressing the general attitudes and perceptions of library staff towards KS at EML were are asked in question 18 and are presented in Table 5.12.

Table 5.12: Attitudes and perceptions of library staff towards knowledge sharing at EML (N=143)

Statement	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral
To me, sharing knowledge with my co-worker is harmful	82 57.3%	46 32.2%	0 0%	0 0%	15 10.5%
To me, sharing knowledge with my co-workers is pleasant	1 0.7%	0 0%	48 33.6%	87 60.8%	7 4.9%
To me, sharing knowledge with my co-workers is worthless	40 28%	102 71.3%	1 0.7%	0 0%	0 0%
To me, sharing knowledge with my co-workers is wise	1 0.7%	0 0%	61 42.7%	74 51.7%	7 4.9%
To me, sharing knowledge with my co-workers is good	1 0.7%	0 0%	45 31.5%	97 67.8%	0 0%

(Source: Field Data, 2019)

Table 5.12 above indicates that respondents who felt that sharing knowledge was good have the highest percentage 97 (67.8%). From the responses given, 87 (60.8%) thought that sharing knowledge with co-workers was pleasant and 74 (51.7%) viewed KS with co-workers as wise. 102 (71.3%) of the respondents disagreed that sharing knowledge is worthless whereas 82 (57.3%) strongly disagreed that sharing knowledge was harmful. The findings suggest that respondents had strong feelings that KS with co-workers was a good practice.

5.3.4.2 Skills and expertise shared among employees at EML

Statements discussing skills and expertise of respondents at EML as asked in question 19 are presented in Table 5.13.

Table 5.13: Skills and expertise shared among employees at EML. (N=143)

Statement	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral
I share skills in cataloguing and classification of library materials with my colleagues.	32 22.4%	48 33.6%	10 7%	15 10.5%	38 26.5%
I share knowledge and expertise on using online resources e.g. intranet, Databases etc. with my colleagues	23 16%	18 12.6%	36 25.2%	47 32.9%	19 13.3%
I share skills in new technological developments with my colleagues.	3 2.1%	6 4.2%	91 63.6%	24 16.8%	19 13.3%
I share skills in library practices and procedures with my colleagues.	9 6.3%	16 11.2%	37 25.9%	64 44.8%	17 11.8%

(Source: Field Data, 2019)

Those who said they shared skills in new technological developments with colleagues had the highest percentage 91 (63.6. %) responding that they strongly agreed with the statement. Sixty-four (44.8%) said that they shared skills in library practices and procedures with colleagues. Only 15 (10.5%) agreed that they shared classification and cataloguing skills with colleagues. Forty-eight (33.6%) disagreed that they shared classification and cataloguing skills about library materials with colleagues, this is due to the fact that this section is one of the smallest sections in the library and the number of staff members working as cataloguers was the lowest hence the response rate. Overall, library staff at EML seemed to be willing to share their skills and expertise with colleagues.

5.3.5 Section E: Challenges with knowledge sharing

Factors/barriers affecting knowledge sharing at EML are presented in this section.

5.3.5.1 Individual factors/barriers affecting knowledge sharing at EML

Statements discussing individual factors/barriers affecting KS at EML as asked in question 20.1 are presented in Table 5.14. This question would assist to determine if there were individual factors or barriers affecting KS at EML. Six possible individual factors/barriers statements to KS were given to respondents to select those applicable to them.

Table 5.14 below summarises responses on the extent to which respondents agreed or disagreed with the general statements about barriers that might hinder KS.

Table 5.14: Individual factors/barriers affecting knowledge sharing at EML (N=143)

Statement	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral
Knowledge is power, I cannot share it with anyone	104 72.7%	37 25.9%	1 0.7%	1 0.7%	0 0%
There is a general lack of time to share knowledge	57 39.9%	29 20.3%	21 14.7	19 13.3%	17 11.9%
Misconception about knowledge sharing	13 9%	22 15.4%	35 24.5%	45 31.5%	28 19.6%
There is a lack of interaction between those who can provide knowledge and those who need knowledge.	57 39.9%	49 34.3%	2 1.4%	16 11.2%	19 13.2%
Fear restricts staff from seeking knowledge from their immediate superiors and peers	22 15.4%	20 14%	37 25.9%	36 25.2%	28 19.5%
There is general lack of trust among staff members in the organisation	10 7%	15 10.5%	26 18.2%	78 54.5%	14 9.8%

(Source: Field Data, 2019)

As shown in Table 5.14 a majority of respondents 104 (72.7%) strongly disagreed and 37 (25.9%) disagreed with the statement that knowledge is power I cannot share it with anyone. Some of the respondents 57 (39.9%) disagreed that time was a barrier to KS among individuals at EML. Forty-five (31.5%) respondents agreed that misconception about the concepts of KS affect the sharing of knowledge among individuals at EML. Fifty-seven (39.9%) of the respondents strongly disagreed that lack of interaction between those who can provide and those who need knowledge affect KS at EML. The results revealed that 78 (54.5%) of the respondents agreed with the statement that there was a general lack of trust among personnel at EML. Thirty-seven (25.9%) agreed with the statement that fear restricts staff from seeking knowledge from their immediate superiors and peers. A study conducted by De Long and Fahey (2000), established that the level of trust that exists within an organisation, its subunits, and its employees greatly influences the amount of knowledge that flows both between individuals and from individuals into the firm's databases, best practices archives and other records.

5.3.5.2 Organisational factors/barriers affecting knowledge sharing at EML

Statements discussing organisational factors as asked in question 20.2 are presented in Table 5.15. Respondents were asked about organisational factors/barriers which hindered KS at EML. This question intended to confirm any organisational KS practices that encouraged KS.

On the other hand, it was also important to understand the factors that impact KS at EML. Lastly, this question was meant to identify available strategies that were used for KS. Eight statements were given and respondents were asked to indicate to what extent they agreed or disagreed with each statement.

Table 5.15: Organisational factors/barriers affecting knowledge sharing at EML (N=143)

Statement	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral
There is a lack of reward and recognition system to motivate knowledge sharing	13 9%	17 11.9%	57 39.9%	40 28%	16 11.2%
Inadequate information systems and processes discourage knowledge sharing	11 7.7%	15 10.5%	43 30%	65 45.5%	9 6.3%
There is no system to identify colleagues to share knowledge.	22 15.4%	27 18.9%	49 34.3%	32 22.4%	13 9%
Physical work environment and layout of work areas restrict effective knowledge sharing	10 7%	12 8.4%	29 20.2%	66 46.2%	26 18.2%
There is a lack of formal and informal activities to instil knowledge sharing	9 6.3%	12 8.4%	53 37%	42 29.4%	27 18.9%
The existing culture at EML does not support knowledge sharing sufficiently	10 7%	18 12.6%	39 27.3%	48 33.6%	28 19.5%
Retention of highly skilled and experienced staff is not a priority	12 8.4%	17 11.9%	33 23%	29 20.3%	52 36.4%
Lack of budget to support knowledge sharing projects	7 4.9%	12 8.4%	72 50.4%	29 20.3%	23 16%
Lack of support from top management	1 0.7%	2 1.4%	70 49%	37 25.9%	33 23%

(Source: Field Data, 2019)

Table 5.15 shows that more than half 72 (50.4%) of respondents strongly agreed that lack of a budget to support KS projects is a barrier to KS at EML. These findings suggest that KS at EML was not a funded mandate or activity. Almost half of the respondents 70 (49%) strongly agreed that lack of support from top management was a barrier, while, 66 (46.2%) agreed that physical work environment and layout of work areas restricted effective KS**.** According to Andries (2016), a physical environment and layout of work areas in an organisation play a major role in KS. Sixty-five (45.5%) respondents agreed that inadequate IT systems and processes discouraged KS at EML. It appears from the results that most employees at EML

perceived IT as an important tool for KS. Fifty-seven (39.9%) strongly agreed that lack of a reward and recognition system to motivate KS was a barrier. Fifty-three (37%) strongly agreed that there is a lack of formal and informal activities to instil KS. Forty-nine (34.3%) strongly agreed that there was no system in place to identify colleagues to share knowledge.EML was not able to track those knowledgeable employees and the type of knowledge they possessed. This would assist the researcher to understand to what extent EML played a role in promoting KS. Fifty-two (36.4%) were neutral when responding to the statement that retention of highly skilled and experienced staff was not a priority. The aim of this statement was to identify whether EML valued the tacit knowledge held by skilled and experienced staff. Results revealed that thirteen (9%) of respondents were uncertain about the statement. Forty-eight (33.6%) agreed that the existing culture at EML does not support KS sufficiently. The results suggest that there was lack of a knowledge friendly culture at EML.

5.3.6 EML staff opinion on ways to improve knowledge sharing among library staff at EML

This final question, question 21 asked respondents to give their opinions on how to improve KS at EML. This would reveal strategies that employees at EML prefer for KS. This question was aimed at recommending how KS can be improved and the question was an open-ended one wherein various suggestions could be made.

A majority one hundred and six (74.1%), of the respondents stated that KS should be made part of the municipal culture. They also stated that KS among staff should be encouraged by the municipal and relevant funding and management support should be made a priority in order to ensure KS. Respondents felt that the municipal needs to create an environment conducive to KS through promotion, rewards/incentives and infrastructure development.

Respondents recommended that a KS strategy be put in place to ensure that knowledge hoarding is discouraged and that staff members are educated on the importance of sharing of knowledge in an organisation. Respondents also indicated that the municipal needs to hold more workshops and training with regards to KS. In particular, top management should be trained on/and about KM. Such training could be in the form of workshops, short courses and a formal training courses that are certified. Respondents indicated that if employees are trained to know the benefits of KS, they would be more likely to share knowledge freely.

5.4 Interview schedule results

The researcher conducted interviews to establish the state of KS at EML. Interviews were arranged with 12 district managers. The objective of this section is to report the outcomes from the interviews conducted with the district managers. The interview schedule was categorised into the following four categories: Section A: Demgraphic profile section; Section B: General questions; Section C: Knowledge sharing business process, and Section D: Information technology systems. The results are organised thematically in order to provide a descriptive presentation of the qualitative data.

5.4.1. Section A: Demographic profile section

This section explores the demographics of the interviewees employed as district managers at EML. Interviews were conducted with 12 district managers.

5.4.1.1 Gender demographics

Table 5.16 shows that from the 12 interviews conducted with district manager, six (50%) of those were with male respondents and six (50%) were with female respondents.

Table 5.16: Gender demographics (N=12)

Gender of interviewees	Frequency	Percentage
Male	6	50%
Female	6	50%
Total	**12**	**100%**

(Source: Field Data, 2019)

5.4.1.2 Race demographics

As depicted in Table 5.17, from the 12 interviews conducted, 87 (58.4%) were with black respondents, three (25%) were Indian respondents and one (8.3%) interview was conducted with coloured and white respondent.

Table 5.17: Race demographics (N=12)

Race of interviewees	Frequency	Percentage
Black	7	58.4%
White	1	8.3%
Indian	3	25%
Coloured	1	8.3%
Total	**12**	**100%**

(Source: Field Data, 2019)

5.4.1.3 Educational qualifications of interviewees

Table 5.18 below illustrates the qualification of interviewees. A majority eight, (66.7%), of respondents had a postgraduate qualification.

Table 5.18: Qualifications of interviewees (N=12)

Qualification of interviewees	Frequency	Percentage
Graduate	4	33.3%
Postgraduate	8	66.7%
Total	**12**	**100%**

(Source: Field Data, 2019)

5.4.1.4 Years of working experience of interviewees

Table 5.19 below indicates the interviewees years of work experience at EML, half of the interviewee six (50%) stated that they have worked for the municipal for 6 to10 years. There was an even scoring of individuals who indicated that they have worked for the municipal for 11 to 15 years, 16 to 20 years and more than 20 years all scoring two (16.6%) respectively. none zero (0%) of the interviewees had worked for less than five years.

Table 5.19: Years of experience (N=12)

Years of experience of interviewees	Frequency	Percentage
Less than 5 years	0	0%
6-10 years	6	50%
11-15 years	2	16.7%
16-20 years	2	16.7%
More than 20 years	2	16.6%
Total	**12**	**100%**

(Source: Field Data, 2019)

5.4.2 Section B: General questions

Interviewees were asked general questions regarding KS in order to ensure that interviewees were able to answer all subsequent questions from the interview schedule. This section allowed the researcher to determine if there was an awareness of KS among management at EML.

5.4.2.1 Awareness and understanding of knowledge sharing

All 12 (100%) interviewees responded that they did have an understanding of the concept of KS and the purpose it serves. Barraclough, Averweg and Spencer (2006), state that KM became a strategic issue for eThekwini Municipal as early as 2005 with the realisation that a significant

amount of knowledge was generated at the city-level but at the same time, knowledge was lost when people retired or left the City administration. One of the interviewees expressed that:

''I am fully aware of the importance of knowledge sharing. In my view knowledge sharing refers to an activity where two or more people exchange information and ideas. This can be done in different ways, e.g. via social media, meetings, e-mails, person to person conversations''

5.4.2.2 Current status of knowledge sharing at EML

Seven (58.3%) of the interviewees stated that KS at EML was in a developmental phase. Interviewees also stated that there was currently no policy that was specifically directed at guiding the practice of KS. All interviewees 12 (100%), responded that they use other policies in the organisation such as the communication policy, internet policy, IT policy, and to create, organise, share, and store knowledge. One of the interviewees expressed that:

''Knowledge sharing is relatively new at EML as a unit within the Municipal, as a result there is currently no structure in place for knowledge sharing.''

5.4.3 **Section C: Knowledge sharing business processes**

Ncoyini, and Cilliers (2016), assert that municipalities embody a significant economic sector where public needs for service delivery are becoming increasingly demanding. They further state that in recent years, the municipal's performance to deliver services to the citizens has been heavily criticised (Wright and Taylor, 2009). Municipalities today are exposed to an environment that is transformed and influenced by political, economic, technological, and scientific changes (Theriou, Maditinos and Theriou, 2011). The community demands are more challenging as far as speed, quality, and flexibility of services are concerned, putting more emphasis on improving service delivery (Ncoyini, and Cilliers 2016). Public libraries are part of eThekwini Municipal and its organisational culture. Whatever affects the municipal also has an impact on the public libraries. Hence, interviewees were asked questions regarding KS as a business process at EML.

5.4.3.1 Types of knowledge generated and shared among staff at EML

All 12 (100%) interviewees stated that both types of knowledge were generated and shared at EML. One of the interviewees expressed that:

''Both in the sense that some knowledge is shared in a relaxed and informal way while the other is shared in a formal setting and it is written down for example through formal handover reports from an employee who is about to retire or resign''

5.4.3.2 Supporting knowledge creation and sharing at EML

The interview with district managers revealed that EML had various ways in which they ensure that knowledge is shared. There is a COP that exists within management at EML. The purpose of the COP was to establish a common team among district managers. They were divided into groups for solving common challenges and sharing of best practices within and across the municipalities. One of the interviewees expressed that:

''District managers are involved in the creation of some of the important documents within the libraries section of the municipal. which are then cascaded down to staff at all levels''

5.4.3.3 Existing policies to enhance knowledge sharing

As mentioned earlier all 12 (100%) interviewees stated that there was currently no policy on KS at EML. In the absence of a KS policy, management uses other internal policies in an effort to create, organise, share and store knowledge. One of the interviewees expressed that:

''In the absence of a KS policy I turn to the communication policy, internet policy, and IT policy for guidance when it comes to KS''

5.4.3.4 Budgetary provisions to facilitate knowledge sharing

When asked what budgetary provisions were made to facilitate KS, all 12 (100%) interviewees indicated that KS as a practice was not budgeted for because KS did not appear on the unit's organograms or structures. Interviewees indicated that structurally, MILE is responsible for ensuring that KS is included in the municipal's framework.

5.4.4 Section D: Information technology systems

According to Anna and Puspitasari, (2013), ICTs are important in supporting KS, especially in the digital age. EML is equipped with information technology such as emails, fax, telephone, intranet and internet that may be used for the KS process.

5.4.4.1 Information communication technology infrastructure to support knowledge sharing

All 12 (100%) interviewees stated that EML was well equipped with ICT tools which could support KS.

5.4.4.2 Training in utilising technologies for knowledge sharing

This question sought to understand if there was sufficient training provided for staff members in order to be efficient in using ICTs. The findings revealed that 12 (100%) of interviewees believed that staff at EML did receive training on ICTs. One of the interviewees stated that there was continuous training for basic and advanced levels.

5.4.4.3 ICT tool/s needed to enable inter and intra knowledge sharing across the municipal

When asked to recommend ICT tools that EML needed to enable inter and intra KS within the municipal, all 12 (100%) interviewees responded that there was no ICTs, they felt EML still needed to acquire ICT tools since what was present was inadequate.

5.4.4.4 *Opinion of staff on the benefits of knowledge sharing*

Interviewees were asked to state their opinions on the benefits of KS at EML. The majority of the interviewees stated that ICT supports access, retrieval, sharing and creation of knowledge. One (8.3%) interviewee stated that ICTs enhance people's knowledge and improves services delivered to customers which is crucial, given that customer satisfaction is the ultimate goal.

5.5 Chapter summary

This chapter presented findings on KS among employees at EML. The chapter dealt with the data analysis and presentation of findings from the survey questionnaire and interview schedule. The results were derived from the questionnaires completed by senior librarians, librarian and assistant librarians and interviewees conducted with district managers. The findings indicated that a majority of respondents to both the questionnaires and interviews had great awareness of KS. The study revealed that KS was practiced at EML despite a lack of KS policies, and respondents were aware of the benefits of KS in an organisation. The results also

indicated that respondents had an interest in KS and that they support KS initiatives employed by the Municipal. The findings from both questionnaires and interviews indicated that EML needed to establish a KM section including, training staff about KM and lobbying for management support.

CHAPTER SIX: INTERPRETATION OF THE RESULTS

6.1 Introduction

Chapter Five presented the results obtained from analysis of the questionnaires and interviews. This Chapter presents an interpretation and discussion of the findings that were presented in Chapter Five. The interpretation and discussion were done in relation to research objectives, research questions discussed in Chapter One, literature review discussed in Chapter Three, and data presented in Chapter Five. Furthermore, the SECI model applied in the current study guided the interpretation of these results.

The main objective of the study was to investigate knowledge sharing practices in the public libraries of eThekwini Municipal. The specific objectives of the study were to:

- Establish how library staff at EML practice knowledge sharing;
- Investigate the challenges experienced by library staff members at EML when sharing knowledge; and
- Assess the strategies EML could use to overcome such challenges.

The study was guided by the following research questions:

- What was the extent of knowledge sharing at EML?
- What knowledge sharing practices were undertaken at EML?
- What was the attitude and perception of library staff towards knowledge sharing?
- What were the challenges facing the library staff with regards to knowledge sharing?
- What strategies could EML use to overcome such challenges?

Survey questionnaires were administered to 151 professional library staff which consisted of senior librarians, librarians and assistant librarians from which 143 were completed and returned, yielding a response rate of 94.7%. Interviews were conducted with 12 district managers of the 15 that were targeted, yielding a response rate of 80%.

6.2 The SECI model

As discussed in Chapter Two, the study is largely informed by the SECI model of knowledge creation (Nonaka and Takeuchi, 1995). Therefore, this model was used to organise and analyse data collected through the respondent questionnaires and interviews. Nonaka and Takeuchi (1995), describe how the SECI model of knowledge creation has four stages that need to be completed in order to convert tacit knowledge to explicit knowledge (namely socialisation, externalisation, combination and internalisation). For Nonaka and Takeuchi (1995), explicit knowledge is available in the form of files, library collections, or databases, whereas some types of tacit (implicit) knowledge is available which also serves as an organisation's intellectual capital. Tacit knowledge is either difficult or impossible to access, for example the accumulated experiences, creativity and skills that reside within individuals. The SECI model incorporates inherent variables such as the organisational structure, organisational culture, and IT and management support.

6.2.1 Socialisation (from tacit to tacit knowledge)

Menolli, Cunha, Reinehr, and Malucelli. (2015), described socialisation as the conversion of part of a person's oown tacit knowledge to the tacit knowledge of another person and this occurs through the sharing of experiences between people. At EML, knowledge was shared through discussions conducted in formal meetings, COP, and training programmes. Through these programmes, employees gain more experience by face-to-face discussions with colleagues from other sections of the unit. Information and communication technology such as emails, intranet and the municipal's website enabled tacit knowledge to be transferred from one employee to other employees.

6.2.2 Externalisation (from tacit to explicit knowledge)

Externalisation is defined as the conversion of tacit knowledge into documented knowledge (Nonaka and Takeuchi, 1995). At EML, tacit knowledge was transformed into explicit knowledge by providing monthly reports. Employees are asked to document and report the outcomes of their discussions in meetings, workshops and other training programmes. Essentially, externalisation at EML occurs when tacit knowledge is codified into documents such as reports, library guidelines, and manuals.

6.2.3 Combination (from explicit knowledge to explicit knowledge)

According to Toyama, and Konno (2000), combination is the process of converting explicit knowledge into more complex and systematic sets of explicit knowledge and it involves the use of social processes to combine different bodies of tacit knowledge held by employees in an organisation. The combination process reformulates explicit knowledge into a clearer and more beneficial form for the use by municipalities and staff. Reconfiguration of existing knowledge leads to the creation and sharing of new knowledge (Nonaka, 1994). At EML, employees exchange and combine KS through meetings, telephone conversations, and document exchanges. EML also transfers explicit knowledge to explicit knowledge by continuous updating of records, reports, municipal website, and the intranet.

6.2.4 Internalisation (from explicit knowledge into tacit knowledge)

Internalisation is the process of converting explicit knowledge to tacit knowledge and is closely related to learning by doing (Nonaka and Takeuchi, 1995). eThekwini municipal houses an in-house academy where employees are encouraged to studying towards relevant courses. EML supports staff members to attend workshops and other training programmes. Internalising knowledge is also related to learning by doing, so training on the job has an important role (Nonaka and Takeuchi, 1995). In this study, procedure manuals were identified as support materials used to solve some work-related problems. Tacit knowledge that is accumulated can then set off a new spiral of knowledge creation when it is shared with others through socialisation (Nonaka, Toyama, and Konno, 2000).

6.3 Demographic profile of respondents

Demographic profiling was not part of the study objectives, but it was important to discuss the profiles of library staff since they are known to affect KS (Kim and Lee, 2006). Section A of the questionnaire and interview opened with the respondent's profile. The respondents' profile from the questionnaires revealed that less than a third, 42 (29.4%) of the respondents were above 45 years. The findings also revealed that EML had more than half, 79 (55.3%), of employees who had worked for the municipal for 10 years and longer as indicated in Table 5.5 of Chapter Five. Staff composition at EML was predominantly black, 99 (69.23%), including junior management positions. As far as gender was concerned, EML had more females at 89 (62.2%) than males at 54 (37.8 %). This revealed a violation of the Employment Equity Act. More than two thirds, 92 (64.33%), held a Bachelor's degree. Thirty (21%) of the respondents held a BTECH. The difference between the two is that the Bachelor's degree is obtained from

a traditional university such as the University of KwaZulu-Natal whereas the BTECH was obtained from a University of Technology such as the Durban University of Technology. The lowest number of respondents, three (2.1%), held a Master's degree followed by two (1.39%) respondents with an honours. From the remaining respondents, 16 (11.18%) had a National Diploma. The results showed a zero (0%) response rate from respondents who held a matric/ grade 12 and those who held a doctoral degree (PhD) as their highest qualification. Irrespective of the qualifications of employees at EML, their participation in KS activities was found to be largely the same.

The profile of the interviewed district managers is shown in Table 5.16 in section 5.3.1.1, and from the 12 interviews conducted with district managers it was revealed that, six (50%) of those were with male respondents and six (50%) were with female respondents. Table 5.17 also showed that seven (58.4%) were black, three (25%) were Indian and one (8.3%) was coloured and white respondent, respectively. Furthermore, half of the interviewees, six (50%), stated that they had worked for the municipal for 6 to 10 years. There was an even number of individuals who indicated they had worked for the municipal for 11 to 15 years, 16 to 20 years and more than 20 years scoring two (16.6%) respectively. None, (0%) of the interviewees had worked for less than five years. Two thirds, (66.7%) of respondents had a postgraduate qualification and only four (33.3%) respondents were undergraduates. These findings suggest that demographic profiles such as positions held, working experience, and age, affected KS among library staff. Staff that had stayed with the municipal up to the age of retirement was inclined to hoard their knowledge, to keep their positions. The findings further revealed that lack of KS strategies made it difficult to access tacit knowledge at EML.

6.4 Knowledge sharing in public libraries

Most of the literature consulted for this study focused on KS in academic/university libraries or the private sector. Very few empirical studies on KM and KS on public libraries were available. This then created a knowledge gap for the researcher to fill. However, the literature was still useful and helped guide the present study. The purpose of the study was to investigate KS practices at EML. Kim and King (2004), assert that KS is about communicating knowledge within a group of people. The group may consist of members engaged in a formal or an informal conversation. Due to the increasing importance of KS and its components, various studies are conducted in this regard by researchers worldwide. The first research question in this study sought to understand the extent to which knowledge was shared in public libraries. Findings

from both the interviews and survey questionnaire of the King (2004), study revealed that public libraries were involved actively in acquiring and generating knowledge. Information obtained from both the questionnaire and interviews in the present study showed that the highest percentage, 104 (72%) of the respondents agreed that staff members in public libraries gained new ideas through social gatherings. In addition, 88 (61.5%) reflected that the library staff members improve KS by attending seminars, workshops, training and development programmes. The conclusion reached in the current study is therefore similar to the findings of Dikotla, Mathatji and Makgahlela (2014). Dikotla et al (2014), suggested that the culture of KS does exist within individual public libraries in certain municipalities but not in all municipalities. This means that public libraries that perform well do not share best practices with underperforming ones.

District managers revealed that public libraries had various ways in which they ensure that knowledge is shared. There is a COP that exists within management at EML. The purpose of was to establish a common team among district managers. They were divided into groups for solving common challenges and sharing of best practices within and across the municipalities. It is evident from the empirical findings that management supports knowledge creation and sharing among library staff at EML.

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6.5 Current status of knowledge sharing initiatives at EML

Knowledge management became a strategic issue for eThekwini Municipal as early as 2005 with the realisation that a significant amount of knowledge was generated at the city-level but at the same time, knowledge was lost when people retired or left the city administration (Municipal Institute of Learning, 2014). The aim of the municipal's initial KM efforts was to develop a repository of knowledge and information available to people in the organisation and other cities worldwide.

District managers stated that there was currently no policy on KS at EML. In the absence of a KS policy, management uses other internal policies in an effort to create, organise, share, and store knowledge. This indicated that KS is still at the developmental phase an EML.

Of the respondents, 54 (37.8%) indicated that they preferred sharing knowledge using intranet and knowledge repositories with co-workers. In addition, 68 (48%) showed interest in sharing knowledge through storytelling and 74 (51.7%) used social networks such as Facebook, Twitter, wikis and library blogs. These findings indicate that EML emphasised formal and

informal social learning as an important medium for knowledge creation and sharing. Library staff in lower ranks were able to speak freely at meetings enabling tacit knowledge to be extracted from employees. This indicated that EML is equipped with IT that could be used for KS processes.

According to respondents, KS as a practice was not budgeted for because KS did not appear on the unit's organograms or structures. Respondents indicated that structurally MILE was responsible for ensuring that KS is included in the municipal's framework. The MILE was developed as a programme and institutional response to the learning needs of eThekwini Municipal. It comes at the back end of a range of needs based knowledge and innovations that have emerged over the years. Because MILE is not an isolated intervention it must be mindful of other knowledge related initiatives that co-exist in the same space (Municipal Institute of Learning, 2014).

6.6 Strategies available for knowledge sharing

The findings in the current study revealed that EML used different strategies for KS that included among others social networks, video conferencing, storytelling, intranet, and knowledge repositories. Respondents also highlighted how knowledge is rooted in social interactions as a form of social learning which is acquired through some form of participation, and is continually reproduced. Similarly, Amayah, (2013), confirmed that KS refers to the provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures. Taminiau, Smit, and De Lange (2007), stated that KS may take place in two ways, for example, formal and informal. This implies that the sharing of knowledge can take place even where there is no specific intention to do so. The authors further stated that half of the KS takes place through informal channels for example through telephones or emails. Von Krogh, Ichijo and Nonaka (2000), also found that the greater part of KS takes place informally. Taminiau et al. (2009), contend that formal KS comprises all the forms of knowledge sharing that are institutionalised by management. Taminiau et al. (2007), list other examples of formal knowledge sharing as meetings and organised brainstorm sessions. According to Sandhu, Jain and Ahmad, (2011), there are several ways of transferring knowledge. Initiatives discussed in the current study are social networks, video conferencing storytelling, intranet and knowledge repositories. The different forms and channels used as a strategy for KS among library staff members at EML are discussed in sections 5.3.3.2 of Chapter Five.

6.6.1 Social networks

The findings revealed that 104 (72%) of the respondents agreed that staff members at EML gained new ideas through social gatherings. In addition, 88 (61.5%) reflect that the library staff members improve KS by attending seminars, workshops, training, and development programs held periodically by the municipal. Muchaonyerwa (2015), emphasised that social networks as a strategy for KS are some of the most common tools of web 2.0 technologies that support informal relationships through collaboration, knowledge sharing, interaction, and communication among users from different places. Casey and Savastinuk (2006), also stated that the internet, particularly web 2.0, has dramatically changed the way people locate and share knowledge in an organisation. Web 2.0 technologies engage library staff and users in a two-way communication, thus enhancing KS. For instance, through web 2.0 the library can deliver services to users via the Library website, instead of users physically visiting the library (Muchaonyerwa, 2015).

Mosala-Bryant (2015), conducted a study on KS in public service: a case study of the KwaZulu-Natal Provincial Human Resource Development Forum. The study found that there was low use of ICTs such as social media, emails and online discussion forums for sharing knowledge. The findings in the current study revealed that channels of communication existed at EML. Seventy-four (51.7%) of the respondents as shown in Table 5.10, were positive that they used social networks, with 15 (1.5%) either agreeing or disagreeing that they used social networks for the purpose of KS.

6.6.2 Videoconferencing

One hundred and twenty-five (87.4%) respondents did not perceive videoconferencing as a useful channel in sharing knowledge with co-workers (see Table 5.10). Only two (1.4%) were neutral, which implied that they either agreed or disagreed with the statement that they used video-conferencing for sharing knowledge. According to Muchaonyerwa, (2015), videoconferencing allows people who are geographically dispersed to share knowledge at the same time. Results from the current study confirmed that videoconferencing as a KS tool was not utilised at EML. The reason for this was probably because of budget shortfalls, since the technology requires a huge investment (Muchaonyerwa, 2015).

6.6.3 Storytelling

Storytelling has always been one of the most popular and effective ways of knowledge transfer (Botha, 2007). Storytelling could provide a useful tool for capturing and disseminating knowledge in organisations. A study conducted by Kim and Lee (2006), found that, even when clearly designated channels of communication existed, individuals tended to rely more on informal relationships such as storytelling for communication. Storytelling as an informal channel for KS among staff is useful in preserving the organisational knowledge and revealing how things work within the library. The current study revealed that staff at EML, were using storytelling to share and exchange ideas and feedback. Sixty-eight (48%) showed interest in sharing knowledge through storytelling (see Table 5.10). Fifty-six (39%) were neutral, implying that they either agreed or disagreed with the statement this could be because some staff members at EML had a lack of understanding or were unfamiliar with the concept of storytelling as a KS tool.

6.6.4 Intranet

Intranets are a powerful tool for communication and collaboration that present data and information and the means to create and share knowledge in one easily accessible place (Sayed et al, 2009; Averweg, 2012). For example, municipal reports and documents, such as strategic plans, reports, policy, and frequently asked questions and answers can be contained in an organisation's intranet and made available and easily accessible electronically from a single point of access. Averweg's (2012), study found that eThekwini Municipal's intranet was at a medium maturity level. Whilst there was information sharing, the intranet was not found to be of use as a structure for sharing knowledge. There was room for enhancement of the content on the intranet although it appeared to only augment KS in a limited capacity. Findings from the current study indicate that 54 (37.8%) respondents preferred sharing knowledge using the intranet with co-workers. It is evident in the current study that the intranet is used as a tool for KS in public libraries, but only to a limited extent. These findings seem to agree with a study conducted by Mosala-Bryant (2015), on KS in public service which revealed that the intranet was used often for accessing sources of PHRD knowledge. The study also revealed that the intranet was also used by senior managers for KS.

6.6.5 Strategies for knowledge sharing

Muchaonyerwa, (2015), stated that, besides the channels of communication, the strategies that are commonly used to enhance KS, focus mainly on capacity building. Such strategies must be

formalised. A library that does not have formal KS strategies in place fails to influence its staff's intellectual capital for new innovation and creativity (Holsapple, 2003; Nonaka and Takeuchi, 1995). The SECI model of knowledge creation (Nonaka and Takeuchi, 1995) asserts that strategies such as a performance evaluation, mentorship programmes, staff development, job rotation, and enabling IT infrastructure, help in retaining existing knowledge in an organisation. The findings of the current study revealed that staff at EML were positive that KS can be encouraged through staff development and providing adequate resources. This thinking was shared by just under a third, 88 (61.5%), of the respondents. (See Table 5.11 Chapter Five). Foss, Minbaeva, Pedersen, and Reinholt (2009), state that staff development matters to KS for motivational reasons. Specifically, staff development contains characteristics that stimulate different kinds of motivation toward knowledge sharing, which have different effects on individual KS behaviour.

6.6.6 Mentorship strategy

Research reveals that mentoring enables senior employees to transfer their knowledge, wisdom, specific insights, and skills to their junior employees and thus is a useful strategy for KS (Dubin, 2005). Beazley, Boenisch, and Harden. (2002), state that mentorship entails the pairing of an experienced member of staff with a new employee in order to assist the new employee acquire new knowledge and skills. There is much to gain by introducing mentorship programmes in an organisation. It offers opportunities to pass on knowledge, skills and experiences. Sharing knowledge through mentoring would ensure a flow of knowledge in public libraries and it would ensure s availability even after an experienced and knowledgeable staff member was to part ways with the organisation. It was therefore necessary to find out if public libraries at eThekwini Municipal had mentorship programmes that would enhance KS. Sixteen (11.2%) of the respondents (see Table 5.14 Chapter Five) felt that EML did not provide mentoring sessions for staff. More than a third 57% (39.9%), strongly disagreed, meaning that mentorship programmes existed at EML.

6.6.7 Non-monetary rewards and incentives

The present study revealed that almost a third, 47 (32.9%), of the respondents (see Table 5.11 Chapter Five) indicated that non-monetary rewards and incentives would be more effective in encouraging KS at EML. These results indicated that there was a lack of non-monetary rewards and incentives that would motivate staff to share knowledge at EML. Oliver and Kandadi (2006) and Willem and Buelens (2007), found that incentivising employees and providing

organisational rewards is an important factor that can encourage KS and motivate employees towards KS and thus foster a knowledge culture. The respondents indicated that staff at EML only received recognition for the number of years of service at the municipal and not their knowledge**.**

6.6.8 Performance appraisal/evaluation strategy

Sixty-nine (48.2%) of the respondents (see Table 5.11, Chapter Five) strongly agreed to linking KS with the performance appraisal/evaluation of staff as a strategy to encourage staff to share knowledge. eThekwini Municipal does have a performance appraisal system in place, However the findings from the current study indicated that it was not linked to KS or used as a KS strategy. Since performance appraisal has a positive effect on knowledge sharing (Horvat, Sharma and Bobek 2015) the findings of the current study suggest that performance evaluation at EML was considered a key strategy for KS among library staff. These findings support those from other studies, that performance appraisal is found to be effective in encouraging KS behaviour, for example staffing, training and development, performance appraisal and compensation (Cabrera, 2005).

6.6.9 Policy framework

A majority of, 104 (72.72%), of the respondents were very positive that there was no KS policy at EML. Interviewees stated that there was currently no policy on KS at EML. In the absence of a KS policy, management uses other internal policies in an effort to create, organise, share, and store knowledge. These findings are similar to those of Msomi (2015), who found that there was no policy on KS within the city of eThekwini. However, this is true of all cities in the country, at the municipal, provincial and national government levels. Msomi (2015), further stated that with no KM policy in place in eThekwini Municipal, a well-developed incentives structure may be a necessary tool to drive KS processes and engender a culture of KS. The present study revealed that in terms of KS strategies, it was found that EML currently practices KS in a fragmented manner. EML operated KS-related programmes but they did not have a fully-fledged KS strategy in place; nor did they have a thorough implementation policy. Although there was a KS framework, this was not widely disseminated, and so, many people are not aware of its existence (Msomi, 2015).

6.7 Attitudes and perceptions of library staff towards knowledge sharing at EML

The third research question sought to understand the attitude and perception of library staff towards KS at EML. The broader objective was to assess the extent to which knowledge was shared at EML. The findings in the current study revealed that more than two thirds of the respondents, 99 (67.8%), felt that sharing knowledge was good. The results of the current study are similar to those of Muchaonyerwa (2015), who investigated attitudes and perceptions of library staff in South Africa, which established that library staff showed a positive attitude towards KS. This positivity was ascribed to the fact that sharing knowledge with co-workers was viewed as being good and wise.

The results of the current study also correlate with the findings of Chipeta (2018), who found that workers' attitudes and intentions to exchange knowledge were related to their inherent drive to exchange knowledge. Chipeta (2018), also found that worker attitudes toward knowledge exchange were deeply linked with their inherent drive rather than external motivation to share knowledge. The results imply that the know-how and self-assurance of employees could be a requisite for KS by workers. Chipeta (2018), further stated that workers who believed in their capacity to 'donate 'knowledge had a greater tendency to contribute their knowledge to co-workers because they derived pleasure from helping others.

The interview with district managers revealed that EML had various ways in which they ensured that knowledge is shared. There was a COP that exists within the management level at EML. The purpose of the COP was to establish a common team among district managers. They were divided into groups for solving common challenges and sharing of best practices within and across the municipalities. These findings indicated that library staff was motivated to share their knowledge at the management level.

6.8 Factors affecting knowledge sharing at EML

Riege, (2005), claimed that there are various factors influencing KS in an organisation. Such factors may emanate from individuals, organisation and technology. Riege (2005), further states that individual factors include: motivation, trust, time, power and leadership, communication skills; while organisational factors include: management support, reward system, organisational structure, human resource management, organisational culture, office politics, and strategies to share knowledge. This section discussed the factors affecting KS at EML. The fourth research question sought to examine the factors that affected KS among

library staff at EML. In the present study, these factors were divided into individual and organisational factors affecting KS at EML**.** In the current study there was consensus between interview and questionnaire respondents that there was KS challenges at EML.

6.8.1 Individual factors/barriers affecting knowledge sharing in municipalities

The findings in the current research revealed that the respondents (district managers, senior librarians, librarians and assistant librarians) all agreed that, the individual factor was important in KS. According to Maiga (2017), the individual aspects that affect KS include personal expectation, individual attitude and willingness. Maiga (2017), further states that KS is a social activity, thus personal interactions among library staff is essential.

A majority of respondents, 104 (72.7%), strongly disagreed with the statement knowledge is power I cannot share it with anyone. More than a third, 57 (39.9%), of the respondents disagreed that time was a barrier to KS amongst individuals at EML. While just under a third of the respondents, 45 (31.5%), agreed that misconception about the concepts of knowledge sharing affects KS and, 57 (39.9%), of the respondents strongly disagreed that lack of interaction between, those who can provide and those who need knowledge, affected KS at EML. The results revealed that more than half, 78 (54.5%), of the respondents agreed with the statement that there was a general lack of trust among personnel at EML. Thirty-seven (25.9%), agreed with the statement that fear restricts staff from seeking knowledge from their immediate superiors and peers. A study conducted by De Long and Fahey (2000), established that the level of trust that exists within an organisation, its subunits, and its employees greatly influences the amount of knowledge that flows both between individuals and from individuals into the firm's databases, best practices archives and other records. Mtega, Dulle and Ronald (2013), found that knowledge was generated in part through personal experiences and social interactions and shared through discussions. The other individual aspect that affects KS is trust. This must exist between parties prior to knowledge being shared. Lee and Choi (2003), asserted that individuals are the heart of organisational knowledge creation, use, and sharing. Similarly, Kwakye and Nor (2011), revealed that the creation and sharing of knowledge depends on the conscious effort of an individual.

The findings in the current study revealed that misconceptions about KS and lack of trust were the major barriers to KS amongst library staff at EML. These findings support Muchaonyerwa, (2015), who revealed that lack of trust was a barrier to KS among staff in university libraries

in KwaZulu-Natal. According to Chowdhury (2006), one of the most challenging factors that affect KS and its wider adoption in many organisations is that workers do not trust each other, therefore KS does not happen freely and efficiently. Workers often lack confidence when it comes to sharing and exchanging expertise (Agrawal, Muhammed and Thatte, 2008), because individuals do not know for certain how the knowledge will be used.

6.8.2 Organisational factors/barriers affecting knowledge sharing at EML

The findings of the current study show that almost half, 72 (50.4%), of respondents strongly agreed that lack of a budget to support KS projects was a barrier to KS at EML. Interviewees indicated that KS as a practice was not budgeted for because KS did not appear on the unit's organograms or structures. Interviewees also indicated that structurally, MILE was responsible for ensuring that KS was included in the municipal's framework. These findings suggested that KS at EML was not a funded mandate or activity. Lack of support from top management was also recognised by almost half, 70 (49%), of the respondents as a barrier to KS. While, 66 (46.2%), indicated that the physical work environment and layout of work areas restricted effective KS**.** As stated by Andries (2016), a physical environment and layout of work areas in an organisation play a major role in KS. Sixty-five (45.5%), respondents agreed that inadequate IT systems and processes discouraged KS at EML. It appears from the results that most employees at EML perceived IT as an important tool for KS. Fifty-seven (39.9%), strongly agreed that lack of a reward and recognition system to motivate KS was a barrier. Fifty-three (37%), strongly agreed that there was a lack of formal and informal activities to encourage KS. Forty-nine (34.3%), strongly agreed that there was no system in place to identify colleagues to share knowledge. Also, EML was not able to track those knowledgeable employees and the type of knowledge they possessed. This would have assisted the researcher in understanding to what extent EML promoted KS. Fifty-two (36.4%), participants were neutral when responding to the statement that retention of highly skilled and experienced staff was not a priority. The aim of this statement was to identify whether EML valued the tacit knowledge held by skilled and experienced staff. Results for this statements revealed that 13 (9%) of the respondents were uncertain about the statement. Forty-eight (33.6%), agreed that the existing culture at EML does not support KS, sufficiently. The results suggest that there was lack of a knowledge friendly culture at EML.

The result from the current study resonate well with those of Andries (2016), in his doctoral study which explored KS as a means of improving municipal governance in selected Limpopo

municipalities. Andries' study established that lack of support and lack of budget from top management were also amongst the factors negatively affecting KS in the Limpopo municipalities. The findings also suggested that KS in the selected municipalities was not a funded mandate or activity. This means that employees are not accountable to anybody if they decide to share or not share their knowledge.

The results of the current research correlate with the findings of Maiga (2017), who established that the budget to encourage creation and sharing of knowledge was limited. Inadequate funding impedes KS practices because incentives such as monetary rewards may not be implemented in part or even in whole. Additionally, there was no visible leadership and commitment of top management, which led to the allocation of an inadequate budget for KM initiatives and subsequently resulted in insufficient budgets for organising KS forums and a lack of incentives to encourage staff to share their knowledge.

6.9 Ways to improve knowledge sharing strategies at EML

Muchaonyerwa (2015), stated that KS strategies are important in facilitating KS. Ncoyini and Cilliers (2016), are of the view that KS abilities are fundamental to the success of an organisation to meet the needs and demands of their customers. There are various strategies that organisations may employ to share knowledge. During data collection, the different KS solutions that were identified included top management support, organisational culture, organisational structure, ICTs, and allocation of a budget to support KS projects.

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6.9.1 Top management support

The lack of top management support at EML affects the library staff's attitudes towards KS. Shanshan (2013), noted that if employees have top management support, their attitudes toward KS will be more positive and they will feel more confident to share knowledge. Ncoyini and Cilliers (2016), stated that top management support is one of the critical factors for the implementation of KS. Top management at EML can play an important role by ensuring that KS is successfully implemented. Managers should demonstrate a willingness to offer and freely share their knowledge with other employees, and search for, and learn new knowledge and ideas (Wong, 2005). Therefore, it is the responsibility of top municipal managers to support KS activities and projects by ensuring that sufficient resources are allocated in terms of money to acquire IT infrastructure, skilled labour and time for using KS platforms (Ansari, Youshanlouei, and Mood, 2012). Top management support can improve organisational

performance. Almost half of the respondents, 70 (49%), strongly agreed that lack of support from top management was a barrier for KS at EML.

Msomi (2015), conducted a study to investigate public sector KM in a knowledge economy: the case of eThekwini Metropolitan Municipal. His findings were more elaborate and revealed that there was somewhat of a consensus that for KS to be effective, it needs to have direct support from top management. Many of the respondents in the current study were of the view that top management should be responsible for KS and hence accountable for it; this in turn would lead to greater support for KS implementation among those in lower ranks. Shan, Zhao and Hua (2012), stated that the role of top management is to formalise the organisation's values and vision and project them in a clear, visible, and consistent manner. Thus support from top management gives high priority to processes and provides adequate resources (Msomi 2015). Msomi (2015), also stated that eThekwini did not appear to be dedicating resources to KS, which may be an indicator of lack of support for KS from top management in the organisation. Almost half of the respondents, 70 (49%), in the present study also indicated a lack of support from top management for KS processes.

6.9.2 Organisational culture

Organisational culture is defined as the shared values, beliefs, and practices of the people in the organisation (Syed-Ikhsan and Rowland, 2004). Organisational culture can affect the transfer of knowledge (Boh, Nguyen and Xu 2012). Syed-Ikhsan and Rowland (2004) highlighted the importance of understanding the role of organisational culture in knowledge transfer and sharing before attempting to employ new strategies**.** Organisational culture influences the outcomes of other factors, such as management methods and technology which fundamentally bears upon the success or failure of KS (Syed-Ikhsan and Rowland, 2004). Organisational culture also plays a significant role in facilitating learning, sharing and creation of knowledge. Cultural differences within an organisation have a negative impact on KS. In fact, a study by Dikotla et al. (2014), provided a relevant example using Limpopo municipal individuals from different ethnic groups who were employed in the government sector. These staff found it impossible to share knowledge they possessed due to cultural differences.

The current study also found that the existing culture at EML does not adequately support KS. According to Ncoyini and Cilliers (2016), a collaborative culture is an essential condition for KS to occur between individuals and groups. This is due to the fact that KS requires employees

to come together to interact, exchange ideas, and share knowledge with one another (Wong, 2005). eThekwini Municipal Libraries need to foster an innovative culture in which employees are continually stimulated to generate new ideas, solutions, and knowledge. Groupware systems enhance collaboration by supporting discussions, time management, meetings and creative workshops (Ncoyini and Cilliers 2016).

6.9.3 Organisational structure

Gaffoor and Cloete (2010), define organisational structure as the manner in which individuals and posts are organised to make the performance of the organisation's work possible. They argue that a linear rigid top-down structuring of the organisations' functions does not contribute to the practice of creating organisational knowledge. Government agencies such as public libraries are typically hierarchical and bureaucratic organisations that make sharing of knowledge difficult (Sandhu, Jain and Ahamad, 2011). eThekwini Municipal Libraries structures must be flexible enough to increase distribution of knowledge and cooperation from traditional borders of the organisation towards knowledge creative borders (Ncoyini and Cilliers 2016). Municipal managers must recognise the shortcomings of bureaucratic structures that slow the processes and limit the information flow. The reporting procedures in current structures mean that an excessive amount of time is taken in order for knowledge to filter through every level of the organisation. Knowledge sharing succeeds with structures that support ease of information flow with fewer boundaries between divisions (Ncoyini and Cilliers, 2016). Respondents indicated that structurally, KS is not catered for with in the unit's structures. Interviewees indicated that KS is currently not part of the department's structure, they argued that it needs to be included across all municipal departments.

6.9.4 Information communication technology infrastructure

ICTs are central to the maintenance and organisation of KS efforts (Yeh, Lai and Ho, 2006). EML should invest in comprehensive technological infrastructure such as communication systems and information technology for the purpose of KS. Technologies such as chat rooms, telephone, and video-conference can be used to transfer tacit knowledge (Sedighi and Zand, 2012). Factors such as ease of use, simplicity of technology, connection with knowledge content, standardisation of knowledge structures, and adaptability to the needs of users have to be considered when developing ICT infrastructure (Margilaj and Bello, 2015). The key for EML is to understand how technology is developed and how it is aligned with organisational strategy and knowledge processes. This can play a critical role in managing and supporting KS

activities (Ncoyini and Cilliers, 2016). Training is critical for effective KS among library staff. Through training, employees will have a better understanding of the concept of KS. Library staff members also need to be educated in using ICT tools that can be useful in sharing of knowledge. This will be crucial in ensuring that library staff use the full potential and capabilities offered by a particular ICT (Wong, 2005). Library staff at EML should be trained to understand their roles in performing knowledge-related responsibilities. Such training will also equip employees with skills that foster innovation, creativity, and KS (Ncoyini and Cilliers, 2016). The results of the current study indicated that less than half, 65 (45.5%) respondents agreed that inadequate IT systems and processes discouraged KS at EML. It appears from these results that most employees at EML perceived IT as an important tool for KS.

6.9.5 Budget to support knowledge sharing projects

The results of the current study indicated that KS as a practice was not budgeted for because, as mentioned, earlier KS did not appear on the unit's organograms or structures. Interviewees also indicated that structurally, MILE was responsible for ensuring that KS is included in the municipal's framework. These findings suggested that KS at EML was not a funded mandate or activity. A dedicated budget allocated for KS activities in EML should be allocated. According to Chipeta (2018), providing an adequate budget for KS would assist in acquiring sufficient and appropriate technology facilities for the establishment of KS activities. Andries (2016), also stated that if KS is budgeted for, factors such as rewards and incentives for those involved in KS would be addressed. Enablers such as ICT tools would be made available and maintained.

6.10 Chapter summary

This chapter dealt with the interpretation and discussion of the findings that were presented in Chapter Five. The interpretation and discussion was done in relation to the research objectives and research questions discussed in Chapter One, the literature review was discussed in Chapter Three and data was presented in Chapter Five. Furthermore, the findings were interpreted according to the socialisation part of the SECI model. The findings from this study have shown that there is a good general awareness of KS and its importance and benefits at EML. The findings have also shown that EML did not have a written KS policy in place as evidenced by results from the questionnaires and interviews. Both the questionnaires and interviews concurred that KS practices such as acquisition, creation, sharing, and retention existed at

EML, but there was still room for improvement. The findings in the current study suggest that library staff at EML had strong feelings that KS with co-workers was a good practice. The chapter also discussed social networks, video conferencing storytelling, and intranet and knowledge repositories as strategies available for KS at EML. The different forms and channels used as a strategy for KS among staff members at EML were also discussed. It was evident that, although EML provided formal and informal channels of communication, such as social networking tools (Facebook and Twitter and so forth.), KS was still an under practiced activity.

The current study found that there were a number of problems associated with KS at EML. There was consensus between interview and questionnaire respondents that there was KS challenges at EML. Such challenges were divided into individual and organisational factors. In line with these findings, respondents were asked to recommend strategies for improving KS at EML. The top five recommendations made by respondents included top management support, organisational culture, organisational structure, ICTs, and a budget to support KS projects.

CHAPTER SEVEN: SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

The previous chapter interpreted and discussed the findings of the study. This chapter presents the summary, conclusions, and recommendations based on the interpretations and discussion provided in Chapter Five and Six. Suggestions for future research will also be provided in this chapter. The broad aim of the study was to investigate the KS practices in public libraries using a case study of eThekwini Municipal Libraries (EML). The specific objectives of the study were to:

- Establish how library staff at EML practice knowledge sharing;
- Investigate the challenges experienced by library staff members at EML when sharing knowledge; and
- Assess the strategies EML could use to overcome such challenges.

The study was guided by the post-positivism paradigm in which quantitative and qualitative approaches were used with the survey design. The study was underpinned by the SECI model of knowledge creation (Nonaka and Takeuchi, 1995). The discussion in this chapter is categorised as per the study's research questions outlined in Chapter One (see Section 1.8).

7.2 Summary of the thesis

This thesis consisted of seven chapters.

Chapter one provided an overview of information that gave context to the study. The chapter provided an introduction and background to the study, identified the research problem, and background to the study. Research objectives, research questions, justification of the study, delimitation, definition of terms and concepts, and principal theories upon which the research project was constructed, were also covered. The chapter also outlined the research methodology and methods, ethical considerations, and validity and reliability.

Chapter Two provided a detailed presentation of theories underpinning the study. It discussed the SECI model and its relevance to KS at EML.

Chapter Three provided a review of the empirical and theoretical literature related to the study, based on the study's objectives, covering the practices of KS in public libraries. This chapter

aimed to show what has already been done, the existing gaps in knowledge and hence the need to fill them through the present study.

In Chapter Four the research methodology used to achieve the objectives of the study were discussed. The chapter discussion included: paradigms, approaches, research design, choice of method, area of the study, population of the study, data collection methods, research instruments, data quality control, ethical issues and data processing and analysis.

Chapter Five provided the presentation and interpretation of refined and analysed data that came from the responses obtained from the case study. The data was presented in figures, tables, pies and bar charts with frequencies and percentages given.

Chapter Six discussed the findings of the study, resulting from both the qualitative and quantitative analysis of data. The discussion of the findings was based on the objectives of the study. The findings were related to literature reviewed of KM and the KM theoretical models that underpinned the study; this related particularly to KS.

Chapter Seven provided a summary of findings, conclusions, and recommendations based on the research problem and research questions that were investigated.

7.3 Summary of the findings

This section provides a summary of the findings. The demographic data of respondents is discussed first in this section. The summary of the findings is presented in the order of the following research questions:

- What was the extent of knowledge sharing at EML?
- What knowledge sharing practices were undertaken at EML?
- What was the attitude and perception of library staff towards knowledge sharing?
- What were the challenges facing the library staff with regards to knowledge sharing?
- What strategies could EML use to overcome such challenges?

7.3.1 Summary of the demographic profiles of the respondents

The respondents were required to provide demographic information, which included their gender, race, designation, qualification, length of service, and the section they worked for. The study ascertained that most of the respondents, less than a third, and 29.4% of the respondents

were above 45 years. The findings also revealed that EML had more than half, 55.3%, of their employees who had worked for the municipal for 10 years and more. Staff composition at EML was predominantly black, 69.2%, including junior management positions. As far as gender was concerned EML had more females, 62.2%, than males, 37.8%. More than two thirds, 64.3%, held a bachelor's degree while 21% of the respondents held a BTECH. The least number of respondents, 2%, held a master's degree followed by 1.4% respondents with an honours. From the remaining respondents, 11.2% had a National Diploma. The results showed a 0% response rate from respondents who held a matric/ grade 12 and those who held a doctoral degree (PhD) as their highest qualification respectively. Irrespective of the qualifications of employees at EML, their participation in KS activities was found to be largely the same.

With regard to the district managers, the findings indicated that 50% were male and 50% were female respondents. A further analysis of the demographics of the respondents showed that 58.4% were black, 25%, were Indian and, 8.3%, and was conducted with a coloured and white respondent, respectively. Furthermore, half of the interviewees, 50%, stated that they had worked for the municipal for 6 to10 years. There was an even scoring of individuals who indicated they had worked for the municipal for 11 to15 years, 16 to 20 years and more than 20 years scoring, 16.6%, respectively. None, 0% of the interviewees had worked for less than five years. Two thirds, 66.7%, of respondents had a postgraduate qualification and only 33.3% were undergraduates.

7.3.2 Extent of knowledge sharing at EML

The first research question of the study sought to establish the extent of KS at EML. Respondents rated the importance of KS as very high and indicated that organisational culture at EML promoted KS among employees. The findings revealed that although EML was involved in knowledge creation and sharing, resources and facilities for individual development were not available to all levels. The findings also revealed that there was no staff responsible for promoting KS. Findings from both the interviews and questionnaire revealed that although EML was involved actively in acquiring and generating knowledge, respondents were not aware if there was a KS policy in place to help guide KS.

7.3.3 Knowledge sharing practices undertaken at EML

The findings showed that there were approaches used at EML to ensure KS and acquisition of relevant skills. The findings further revealed that library staff members improved KS by

attending seminars, workshops, training and development programmes held periodically by the municipal. The findings also revealed that library staff preferred sharing knowledge using the intranet and knowledge repositories with co-workers. The findings further revealed that the use of social networks such as Twitter, e-mail, Facebook, library blogs and wikis were helpful in communicating social activities and enabling social relationships among staff. Over half of the respondents, 51.7%, as shown in Table 5.10 in Chapter Five indicated that they used social networks for the purpose of KS.

7.3.4 Attitudes and perceptions of library staff towards knowledge sharing at EML

The findings on the attitudes and perceptions of library staff towards KS revealed that library staff had strong feelings that KS with co-workers was a good practice. Furthermore, the results also revealed that library staff at EML seemed to be willing to share their skills and expertise with colleagues. Over half, 63.6. %, of library staff indicated that they shared new technological developments with colleagues. The interview with district managers revealed that EML had various ways in which they ensured that knowledge was shared. There was a COP that existed within the management level at EML. The purpose of the COP was to establish a common team among district managers. They were divided into groups for solving common challenges and sharing of best practices within and across the municipalities. These findings indicated that library staff were motivated to share their knowledge at the management level.

7.3.5 Factors affecting knowledge sharing at EML

The study revealed that KS among library staff at EML was affected by several factors, such as misconception about the concepts of KS, general lack of trust among library staff, lack of support and lack of budget from top management, were also amongst the factors negatively affecting KS. The results revealed that fear restricted staff from seeking knowledge from their immediate superiors and peers. Inadequate IT systems and processes were also indicated as barriers to KS at EML. It appears from the results that most employees at EML perceived IT as an important tool for KS. The findings further indicated that the lack of a reward and recognition system to motivate KS was also a barrier.

7.3.6 Strategies available for knowledge sharing at EML

The sixth research question investigated EML strategies that supported KS. The findings revealed that EML used different strategies for KS that included among others social networks, videoconferencing, storytelling, intranet, and knowledge repositories. Over half, 51.7%, of

library staff indicated that they used social networks to share their knowledge. The date also revealed that, 37.8%, of library staff indicated that they preferred sharing knowledge using intranet and knowledge repositories with co-workers. In addition, less than half, 48%, showed interest in sharing knowledge through storytelling. Whereas 72% of the library staff indicated that they gained and shared knowledge through social gatherings. In addition, 61.5% reflected that library staff improved KS by attending seminars, workshops, training and development programmes held periodically by the municipal. In terms of KS strategy at EML it was found that currently there were strategies used at EML but these were used in a fragmented manner.

7.4 Conclusions

This section provides conclusions based on the major findings of the study. The conclusions were drawn from the research questions presented in Chapter One and reiterated in this current chapter.

7.4.1 Knowledge sharing strategies available at EML

In terms of a KS strategy, the findings revealed that EML does practice KS in a fragmented manner. The municipal partakes in knowledge sharing-related programmes but they do not have a fully-fledged KS strategy in place; nor do they have a thorough implementation policy. Although there was a KS framework, this is not widely disseminated, so many people are unaware of its existence. While the MILE is the custodian of KS in the municipal, EML conducted knowledge sharing-related programmes (such as COP's) without consulting or involving MILE.

7.4.2 Attitudes and perceptions of library staff towards knowledge sharing at EML

The study found that the majority of library staff at EML had a positive outlook on KS and staff were willing to share knowledge with each other. Majority of the staff indicated that they shared skills on new technological developments with colleagues. The findings also revealed that most of the library staff were aware of the importance of, and appreciated the value of KS.

7.4.3 Factors affecting knowledge sharing at EML

There were both individual and organisational factors affecting KS at EML. The study revealed that misconceptions about the concepts of KS, a general lack of trust among library staff, lack of support and budget from top management were amongst the factors negatively affecting KS. The results revealed that fear restricted staff from seeking knowledge from their immediate

superiors and peers. It appears from the results that most employees at EML perceived IT as an important tool for KS. Inadequate IT systems and processes were also indicated as barriers to KS at EML. The findings further indicated that lack of a reward and recognition system to motivate for KS was also a barrier.

7.5 Recommendations

The current study discussed KS practices in public libraries of eThekwini municipal. A number of recommendations were made based on the findings and conclusions of this study. The researcher proposes recommendations in the following areas: top management support, organisation culture, organisation structure information communication technologies, budget to support KS projects, and having a KS policy.

7.5.1 Recommendation 1: Top management support

Top management support has a positive influence on the attitude of library staff towards KS. The key findings revealed that there was a lack of top management support that, in turn, affected the library staff's attitudes towards KS at EML. Therefore, if employees at EML have top management support, their attitudes toward KS will be more positive and they will likely feel more confident to share knowledge.

7.5.2 Recommendation 2: Organisation culture

The results found that the existing culture at EML does not support KS sufficiently. Given that a collaborative culture is an essential condition for KS to occur between individuals and groups it is important that EML employees come together to interact, exchange ideas and share knowledge with one another. Therefore, EML needs to foster an innovative culture in which employees are continually stimulated to generate new ideas, solutions and knowledge.

7.5.3 Recommendation 3: Organisation structure

It is recommended that EML structure must be flexible enough to increase distribution of knowledge and cooperation from traditional borders of the organisation towards knowledge creative borders. Library district managers must recognise the shortcomings of bureaucratic structures that slow the processes and, thus, limit the information flow. The reporting procedures in current structures take too much time for knowledge to filter through to every level of the organisation. Knowledge sharing succeeds with structures that support ease of information flow with fewer boundaries between divisions. It is therefore recommended that

KS be entrenched within EML's framework and the wider social context so that KS can be properly structured, endorsed and embedded in the organisations libraries.

7.5.4 Recommendation 4: Information communication technologies

ICTs are central to the maintenance and organisation of KS efforts at EML. eThekwini Municipal Libraries should invest in appropriate ICT infrastructure to enable KS to take place in the organisation. Technologies such as social media, mobile phones, note pads, and iPad can be used to transfer tacit knowledge. EML employees will also need to be trained on how to use these ICT tools as well as their role in performing knowledge-related activities. This will be important in ensuring that employees use the full potential and capabilities offered by a particular ICT.

7.5.5 Recommendation 5: Budget to support knowledge sharing projects

It is suggested that a dedicated budget be allocated for KS activities at EML. Providing an adequate budget for KS would enable the acquiring of sufficient and appropriate technology facilities for establishing KS activities in these public libraries. Also if knowledge sharing is budgeted for by EML, challenges such as rewards, incentives and ICT tools would be made available and maintained.

7.5.6 Recommendation 6: Knowledge sharing policy

It is also recommended that EML should consider putting in place a policy that encourages KS. The absence of a KS policy at EML encourages knowledge loss, especially of retiring staff or those departing for other reasons. Such a policy will aim at preserving organisational intellectual assets and will, therefore, enhance KS.

7.6 Suggestions for future research

The present study investigated KS practices in the public libraries of EML. The study was limited to public libraries in eThekwini Municipal only. Future research may be conducted across all South African municipalities, to find out the strategies, practices, and challenges of knowledge sharing in public libraries.

The second suggestion for future research, is the role of ICT in KS in public libraries in South Africa. The area has had little focus in the available literature.

The final suggestion for future research, based on the current study is to investigate KS strategies in South African Cities Network (SACN). SACN is made up of nine cities, namely, Cape Town, eThekwini, Johannesburg, Buffalo City, Mangaung, Tshwane, Nelson Mandela Bay, Msunduzi Local Municipal and Ekurhuleni. There is not enough literature available on SACN, this creates a knowledge gap.

7.7 Chapter summary

This chapter presented the summary, conclusions and recommendations of the study based on the interpretations and discussion provided in Chapter Five and Six. This study revealed a low level of KS at EML due to factors such as, misconception about the concepts of KS, general lack of trust among library staff, lack of support and lack of budget from top management. In order to improve the situation and make the KS processes work, a number of recommendations were made based on the findings and conclusions of this study. The researcher proposed recommendations in the following areas: top management support, organisation culture, organisation structure information communication technologies, budget to support KS project, and having a KS policy. Suggestions for future research were also provided in this chapter.

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APPENDICES

APPENDIX 1: Informed consent letter

12 June 2017

Dear Respondent

My name is Judith Busisiwe Ngcobo a Masters student in the Department of Library and Information Studies, Pietermaritzburg Campus University of KwaZulu-Natal. I am carrying out a research on **knowledge sharing practices in public libraries: a case study of eThekwini Municipal Libraries**. The aim of this study is to explore knowledge sharing practices and experiences at EML.

I would like to invite you to participate in a survey to obtain your views on knowledge sharing practices in your library. Results of the study will be disseminated through conferences, workshops and publications.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Please note that your name will not be included in the report and your confidentiality will be maintained throughout the study. There will be no monetary gain from participating in this research project. The information that you will provide will be used for academic purposes only and not otherwise.

Your participation in answering the questions is completely voluntary. You have the right to withdraw at any time during the study. I appreciate the time and effort it would take to participate in the study.

If you have any questions or concerns about participating in this study, please feel free to contact myself or my supervisor at the numbers or addresses indicated.

Yours Sincerely,

Judith Busisiwe Ngcobo

12 June 2017

Signature Date

Researcher: Judith Busisiwe Ngcobo

Student No: 215081644

Institution: University of KwaZulu-Natal

Telephone number: +27 359026470

+27 611318758

Email address: mabusin86@gmail.com

Ngcobojb@unizulu.ac.za

Supervisor: Prof Ruth Hoskins

Institution: University of KwaZulu-Natal

Telephone number: + 27 (0) 33-260 5093/1065/2898

Email address: hoskinsr@ukzn.ac.za

HSSREC Research Office: Ms P Ximba

Institution: University of KwaZulu- Natal

Telephone number: +27 (0) 31 260 3587

Email address: ximbap@ukzn.ac.za

Please complete this form:

Title of study: knowledge sharing practices in public libraries: a case study of eThekwini Municipal Libraries.

I…… hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participate in the research project as outlined in the document about the study.

I acknowledge that I have been informed of the purposes of this survey. I am aware that participation in the study is voluntary and I understand that I am at liberty to withdraw from the project at any time, should I desire.

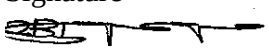
Participant

_____
Signature

_____
Date

_____
Email

Researcher

_____
Signature


_____
Date
12 June 2017

APPENDIX 2: Interview schedule for district managers

Interview Schedule for district managers

Section A: Biographical Information

1. What if your Designation …….
2. Highest level of Education……
3. Working experience in the library ……

Section B: General questions

4. How would you describe your awareness and understanding of Knowledge sharing?
5. At what point did you come to know about knowledge sharing at eThekwini municipal libraries?
6. Please explain the current status of Knowledge sharing in your organisation?

Section C: Knowledge sharing business processes

7. What types of knowledge is generated and shared among staff? (tacit or explicit) or both?
8. Please describe any procedures regarding knowledge sharing in your organisation.
9. Are staff members willing to share knowledge?
10. How would you rate the departmental level of knowledge sharing?
11. How do you support knowledge creation and sharing in your organisation?
    (i) Do you have staff designated for spearheading Knowledge sharing?
12. What policies exist to enhance knowledge sharing?
13. What budgetary provisions are made to facilitate knowledge sharing?

Section D: Information technology systems

14. Do you think your municipal has the necessary information communication technology infrastructure to support knowledge sharing?
15. What information communication technology infrastructure (both hardware & software) are currently being used to enable knowledge sharing?
16. Did employees receive sufficient training in utilising those technologies?
17. What kind of information communication technology tool/s do you think your organisation still needs to enable inter & intra knowledge sharing across the municipal?
18. Do employees make use of those technologies to access information or knowledge?
19. How do you encourage staff members to share their knowledge?
20. In your own opinion what do you think are the benefits of knowledge sharing among library staff?

THANK YOU FOR YOUR TIME AND COOPERATION.

Please return to mabusin86@gmail.com

APPENDIX 3: Survey questionnaire for professional library staff members at EML

Instructions for completing questionnaire:

- Unless otherwise instructed, please place a tick or a cross in the space provided
- When you are required to answer in your own words, please use the space provided.

Section A: Demographic profile (Please tick or cross the chosen option)

1. What is your gender?

Male		Female	

2. Which of the following age range do you belong?

18-25	26-30	31-34	35-39	40-45	Over 45

3. Your race (just for purposes of statistics)

Black	
White	
Coloured	
Indian	

4. How long have you been an employee at eThekwini Municipal Libraries?

Less than a year	
1-2 years	
3-4 years	
5-10 years	
More than 10 years	

5. What is your highest educational/training qualification?

Matric	
National Diploma	
Bachelor's degree	
Honours	
Master's Degree	
PhD	
Bachelor of technology (B-TECH)	

6. Which section are you currently working under?

Branch Libraries	
Technical services	
Departmental libraries	
Reference Library	

7. What is your current position in the Municipal?

Senior librarian	
Librarian	
Assistant librarian	

Section B: The Extent of Knowledge sharing practices at EML.

Kim and Lee (2006:380) define knowledge sharing as the ability of employees to share their work-related experience, expertise and know-how with other employees through informal knowledge sharing within or across team or work units. These definitions were adopted for the current study, as they encompass an emphasis on knowledge sharing as a concept through which employees (library staff) mutually exchange knowledge and jointly create new knowledge that could assist in transforming the library into a more efficient knowledge sharing organisation, if utilised properly. The underlying purpose is to utilise available knowledge to improve the group's performance.

8. How would you rate the importance of sharing knowledge?

Very high	
High	
Moderate	
Very low	
Don't know.	

9. Does your organisational culture promote knowledge sharing and experiences.

Yes	
No	
I don't know	

10. Is your organisation involved in knowledge creation and sharing?

Yes	
No	
I don't know	

11. The diverse membership involving senior and junior management at EML encourage knowledge sharing.

Yes	
No	
I don't know	

12. Resources and facilities for individual development is available to all levels in the organisation.

Yes	
No	
I don't know	

13. Does your organisation have staff responsible for spearheading knowledge sharing?

Yes	
No	
I don't know	

14. Does the organisation have a knowledge sharing policy?

Yes	
No	
I don't know	

15. What approaches are used in your organisation to ensure knowledge sharing and acquisition of relevant skills?

Answer all statements

Statements	**Disagree**	**Agree**	**Neutral**	**Strongly Agree**	**Strongly Disagree**
Staff gain new ideas through social gatherings. Such as departmental meetings, mentoring etc.					
Staff improve their knowledge by learning from other organisations and institutions					
Individuals are committed to professional development					
Seminars, workshops and training and development are held periodically and adequately to help gain new knowledge					

Section C: Factors affecting knowledge sharing

16. What channels of communication do you prefer to use for knowledge sharing purposes?

Answer all statements

Statement	Disagree	Agree	Neutral	Strongly Agree	Strongly Disagree
When I want to share knowledge, I prefer using social networks such as, Facebook, Twitter, Wikis and library blog.					
I use the intranet and knowledge repositories to share knowledge with my co-workers					
I use videoconferencing to share knowledge with my co-workers					
I prefer to share knowledge through storytelling.					

17. What do you think are the ways for encouraging knowledge sharing in your library?

Answer all statements

Statement	Disagree	Agree	Neutral	Strongly Agree	Strongly Disagree
Knowledge sharing can become a culture in the organisation if top management regularly displays and reinforces the theme that knowledge is the lifeblood of an organisation					
Non-monetary shall be more effective in encouraging Knowledge sharing .					
Knowledge sharing can be encouraged if it is linked with the performance appraisal of the staff					
Knowledge sharing can be encouraged if there is a policy which promotes job rotation among employees					
Knowledge sharing can be encouraged through staff development and providing adequate resources					

Section D: Attitudes and perceptions of staff towards knowledge sharing

18. What are the general attitudes and perceptions of library staff towards knowledge sharing**?**

Answer all statements

Statement	**Disagree**	**Agree**	**Neutral**	**Strongly Agree**	**Strongly Disagree**
To me, sharing knowledge with my co-workers is harmful					
To me, sharing knowledge with my co-workers is pleasant					
To me, sharing knowledge with my co-workers is worthless					
To me, sharing knowledge with my co-workers is wise					
To me, sharing knowledge with my co-workers is good					

19. What skills and expertise do you share with your colleagues?

Answer all statements

Statement	**Disagree**	**Agree**	**Neutral**	**Strongly Agree**	**Strongly Disagree**
I share skills in cataloguing and classification of library materials with my colleagues.					
I share knowledge and expertise on using online resources with my colleagues					
My colleagues share with me new working skills they learn					
My colleagues share new skills in library practices with me					

Section E: Challenges with knowledge sharing

20. Factors/barriers affecting knowledge sharing in at eThekwini municipal libraries.

20.1 Individual factors/barriers affecting knowledge sharing at EML**.** (please select an applicable answer by ticking in the box)

Answer all statements

Statement	**Disagree**	**Agree**	**Neutral**	**Strongly Agree**	**Strongly Disagree**
Knowledge is power, I cannot share it with anyone					
There is a general lack of time to share knowledge					
Misconception about Knowledge sharing					
There is a lack of interaction between those who can provide and those who need knowledge.					
Fear restricts staff from seeking knowledge from their immediate superiors and peers					
There is general lack of trust among staff members in the organisation.					

20.2 Organisational barriers/factors affecting knowledge sharing at EML. (please select an applicable answer by ticking in the box)

Answer all statements

Statement	**Disagree**	**Agree**	**Neutral**	**Strongly Agree**	**Strongly Disagree**
There is a lack of reward and recognition system to motivate Knowledge sharing					
Inadequate Information technology systems and processes discourage Knowledge sharing					
There is no system to identify colleagues to share knowledge					
Physical work environment and layout of work areas restrict effective knowledge sharing					
There is a lack of formal and informal activities to instil knowledge sharing					
The existing culture in the municipal does not support knowledge sharing sufficiently					
Retention of highly skilled and experienced staff is not a priority					
Lack of budget to support knowledge sharing projects					
Lack of support from top management					

21. In your opinion, what do you think must be done to improve knowledge sharing among library staff at EML?

_____

_____

The end

Thank you

APPENDIX 4: Request for permission to undertake research at EML

REQUEST FOR PERMISSION TO UNDERTAKE RESEARCH AT ETHEKWINI MUNICIPAL LIBRARIES

Information Studies
School of Social Science
University of KwaZulu-Natal

30 May 217

Attention: Senior Manager (Libraries and Heritage)
EThekwini Municipality Libraries

Dear Madam,

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

My name is Judith Busisiwe Ngcobo, a Masters student at the University of KwaZulu-Natal, Pietermaritzburg campus. I am doing research on **Knowledge sharing practices in public libraries with special reference to EThekwini Municipal Libraries (EML)**. As part of the requirements for the award of the degree, I am required to undertake an empirical study. I have selected EML as my study case. The research seeks to enquire about the practice of knowledge sharing in public libraries. The outcome from the study is expected to improve practice, inform policy and extent theory in this field of study. Therefore, I am writing kindly to request written permission to collect data from library staff as well as the library district managers from EThekwini Municipality Libraries. The possible dates for collecting data are from June 1 – 31 October 2017. The data will be collected through a **survey questionnaire and interview**. Your authorization to this request will be highly appreciated.

I look forward to your permission to collect data in your library.

Yours Sincerely

Judith Busisiwe Ngcobo

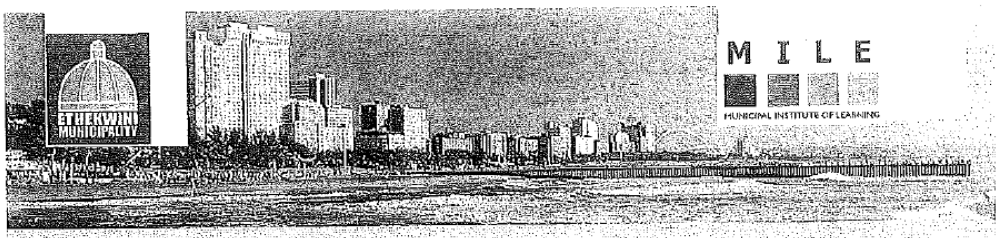
Signature

12/06/2017
Date

Mobile: 0611318758
Email: mabusin86@gmail.com

Supervisor: Prof Ruth Hoskins
Institution: University of KwaZulu-Natal
Telephone number: + 27 (0) 33-260 5093
Email address: hoskinsr@ukzn.ac.za

APPENDIX 5: EML Gatekeepers letter.



Pod 1, Second Floor, Intuthuko Junction, 750 Mary Thiphe Street, Umkhumbane, Cato Manor, Durban 4001.
Tel: 031 322 4513, Fax: 031 261 3405, Fax to email: 086 265 7160, Email: mile@durban.gov.za, Website: www.mile.org.za

For attention:
Chair of Ethics Committee
College of Humanities
School of Social Science
University of KwaZulu Natal
Howard Campus
Durban
4001

30 August 2017

RE: LETTER OF SUPPORT TO JUDITH BUSISIWE NGCOBO, STUDENT NUMBER 215081644- GRANTING PERMISSION TO USE ETHEKWINI MUNICIPALITY AS A CASE STUDY

The Libraries and Heritage Department and eThekwini Municipal Academy (EMA), have considered a request from Ms JB Ngcobo to use eThekwini Municipality as a research study site leading to the awarding of a Master's degree (Information Studies) entitled : **"Knowledge sharing practices in public libraries : A case study of EThekwini Municipal Libraries".**

We wish to inform you of the acceptance of his request and hereby assure him of our utmost cooperation towards achieving his academic goals; the outcome which we believe will help our municipality improve its service delivery. **In return, we stipulate as conditional that she presents the results and recommendations of this study, supported by her academic supervisor, to the related unit/s on completion of her research study.**

Wishing Ms Ngcobo all the best in her studies.

.....

Collin Pillay
Program Manager: MILE

.....

Tebogo Mzizi
Senior Manager : Libraries and Heritage
eThekwini Municipality

.....

Dr M. Ngubane
Head: eThekwini Municipal Academy
eThekwini Municipality

APPENDIX 6: UKZN ethical clearance letter

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

13 September 2017

Ms Judith Busisiwe Ngcobo 215081644
School of Social Sciences
Pietermaritzburg Campus

Dear Ms Ngcobo

Protocol reference number: HSS/1200/017M
Project title: Knowledge sharing practices: A case study of Ethekwini Municipal Libraries

Full Approval – Expedited Application

In response to your application received 24 July 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL.**

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

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

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

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

Yours faithfully

.....

Dr Shamila Naidoo (Deputy Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

cc Supervisor: Professor Ruth Hoskins
cc. Academic Leader Research: Professor Maheshvari Naidu
cc. School Administrator: Ms Nancy Mudau

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
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Website: www.ukzn.ac.za