IMPROVING SERVICE DELIVERY AT THE NATIONAL UNIVERSITY OF LESOTHO LIBRARY THROUGH KNOWLEDGE SHARING

by

TŠEOLE EMMANUEL TAHLEHO

(Student no. 46745807)

Submitted in accordance with the requirements for

the degree of

MASTER OF INFORMATION SCIENCE

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROFESSOR PATRICK NGULUBE

CO-SUPERVISOR: PROFESSOR LUYANDA DUBE

2016

Abstract

Knowledge is now considered the most important organizational resource, surpassing other resources like land and capital. It has, therefore, been acknowledged that knowledge can play an important role in ensuring an organization's competitive edge. The purpose of this study was to investigate if knowledge sharing is being used to improve service delivery at the National University of Lesotho's Thomas Mofolo Library.

The researcher held the view that Librarians at Thomas Mofolo Library have different sets of skills which, if combined, could improve service delivery. By not sharing and retaining this existing wealth of knowledge, the researcher claimed that when librarians retire or resign from work, they will certainly take with them the knowledge they possess and the result of this knowledge loss is that the Library may be plagued by an inability to learn from the past experiences, which leads to reinvented wheels, unlearned lessons and the pattern of repeated mistakes.

Both qualitative and quantitative methods were employed in the case study design in order to allow for multiple methods of data collection. Data were collected by means of questionnaires and interviews. Questionnaires were administered to all librarians who were available at the time and purposive sampling was used to determine interview participants. Out of the 25 questionnaires administered, 15 were returned, providing a response rate of 60%. The data collected by means of questionnaires was processed using Microsoft Access and analyzed using the Statistical Package for Social Science (SPSS) software (Version 17). The results of analysis were exported into Microsoft Excel for visual presentation and reporting of the results.

The data from the interview sessions was analyzed manually by content analysis, using the notes that were taken by the researcher from the respondents during the interview sessions.

The findings pointed to the fact that knowledge sharing does occur at TML, although mostly in an informal manner. This was largely due to a number of impediments such as lack of trust and the absence of motivations and rewards. The study concluded by recommending a number of initiatives that could be implemented in order to retain knowledge within the Library. The recommendations included developing a knowledge-management strategy and formalizing knowledge sharing by formulating the desired policies.

KEY TERMS: Knowledge sharing, service delivery, knowledge management, knowledge loss, knowledge circulation, academic library, librarians

Acknowledgements

This work would not have been a success had it not been for the contributions of other people. I wish to thank Prof. P. Ngulube (supervisor) and Prof. L. Dube (co-supervisor) for their persistent support throughout this study. Their meticulous eye for detail, their expert advice and their caring attitude provided me with a spirit of diligence.

I also wish to express my sincere appreciation to the management and the entire staff of Thomas Mofolo Library (TML) for their willingness to complete the questionnaires and be interviewed.

I am grateful to my mother and my late grandmother for their continued encouragement to further my studies. My special thank you to my beautiful wife, Neo Florinah Tšeole, for funding my studies and for allowing me take up her precious time.

To the almighty God for continued provision of a good life, I say Ebenezer, *Molimo o bile le nna ho fihlela mona*, 1 Samuel 7:12.

Declaration   Student number: **46745807**

I declare that **IMPROVING SERVICE DELIVERY AT THE NATIONAL UNIVERSITY OF LESOTHO LIBRARY THROUGH KNOWLEDGE SHARING** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

31/08/2016

SIGNATURE   DATE

(Mr)

TABLE OF CONTENTS

'

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.0   Introduction

The conventional function of academic libraries is to collect, process, disseminate, store and utilize information to provide a service to the community (Rajurkur 2011:5). However, the environment in which academic libraries function today is shifting. Academic libraries are partly challenged by reduced budgets and an increased demand from the faculty and the student community (Rajurkur 2011:5). Wen (2005:1) said that academic libraries are information centers established in support of the mission of their parent institutions to generate knowledge and people equipped with knowledge in order to serve the community and advance the well-being of mankind.

Similarly, Andeniran (2011:210) noted that academic libraries are service-oriented organizations established for the provision of relevant information resources and quality services to meet their users' information needs.

The success of academic libraries, therefore, depends on their ability to utilize information and knowledge of staff to better serve the needs of the academic community. According to Sowole (as quoted in Andeniran 2011:2010), academic library users are described as the reason for existence of the library. Meeting the information needs of users requires the provision of actual information resources and services that will satisfy the needs of users. Simmonds and Andaleeb (2001:629) stated that several factors could influence users' satisfaction; these factors include responsiveness, competence and assurances, tangibles and resources. Kulkarni and Deshpande (2012:2) asserted that the quality of service delivery is the most important factor among all library operations. Continuous improvement in the quality of services offered against the expectations by the user is the aim of the service quality (Kulkarni and Deshpande 2012:2).

By providing quality services and satisfaction to users, Simmonds and Andaleeb (2001:627) argued that academic and research librarians can distinguish their services through friendly, helpful and knowledgeable advice and the best technological resources available. Kulkarni and Deshpande (2012:2) posited that for the librarians the expectations of the users serve as a guideline for the integrated library development, planning of library services and the enrichment of the already existing collection. As such, knowledge about the expectations of the library users has become significant for librarians.

Knowledge sharing is one of the viable means through which academic libraries could improve their services in the knowledge economy (Maponya 2004:2). Bouthillier and Shearer (2002:5) defined knowledge as the condition of knowing something gained through experience or the condition of apprehending truth or fact through reasoning. According to Kamal, Manjit and Gurvinder (2007:23) knowledge is considered to be the main driver of the economy in a knowledge economy landscape. This is largely due to the undisputed fact that it is a valuable and strategic asset that enables organizations to achieve a competitive advantage and resilience (Butler, Feller, Poppe and Barry as cited in Dube and Ngulube 2012:68). Smith (2009:312) said the value of knowledge is increased when it has a key purpose and focuses on mission, core values and strategic priorities. Similarly, Dube and Ngulube (2012:68) argued that the value of knowledge increases when it is shared.

According to Okonedo and Popoola (2012:6), knowledge sharing is defined as an activity of disseminating information, values and ideas about the perception between two parties to agree or disagree. Knowledge sharing enables employees to share their insight and

experiences in order to allow for fast, efficient and effective provision of information services to their users. Dube and Ngulube (2012:69) argued that knowledge sharing could give an organization a competitive advantage. The people engaged in the process of knowledge sharing may enhance their performance through exploiting their collective intellectual capital (Dube and Ngulube 2012:69). Christensen (2007:44) asserted that if knowledge sharing is to positively impact on the organizational performance, then companies would have to engage in continuous knowledge sharing since the process consists of transferring from the more knowledgeable to the less knowledgeable. If knowledge is not shared, the risk of duplication of work exists. In a library environment, this happens, for example, when service providers on the night shift make the same mistakes that service providers on the day shift have already made (Christensen 2007:44).

As Jantz (2001:34) stated, if libraries use and share knowledge, they will improve their services. In addition to that, Mavodza and Ngulube (2011:15) said that some academic libraries in the developed world have significantly developed and are applying some knowledge management (KM) principles and practices in the provision of library services. Wen (2005:1) stated that, to prove their relevance and value, academic libraries should strive to provide the right amount of information to the right clientele at the right time with the right expense of financial and human resources. With stagnant library budgets, academic libraries have to increase their operational efficiency in order to meet the challenge. One management tool that can assist in this regard is the knowledge management process of knowledge-sharing (Wen, 2005:1).

For Malhotra (2000:54) knowledge-sharing enables libraries to organize and provide access to intangible resources that help librarians and administrators to carry out their

tasks. If knowledge sharing is practiced in libraries, personal knowledge may be turned into corporate knowledge that can be widely shared throughout the library and applied appropriately. Shanhong (2000:7) argued that knowledge-sharing injects new blood into the library culture, which results in mutual trust, open exchange, studying, sharing and developing the knowledge operation mechanism of libraries.

Although knowledge can be acquired at individual level, it must be shared by a community (often described as a community of practice) to be useful. For instance, if there is only one person who knows organizational rules and procedures, such rules and procedures would be useless and meaningless. On the other hand, rules and procedures emanate from communities and exist to regulate group activities. Knowledge-sharing is then crucial when new employees arrive and others resign (Bouthillier and Shearer 2002:15).

Van der Walt, Van Brakel and Kok (2004:1) opined that to understand the process of knowledge sharing, enterprises should understand the broader concept of knowledge management. According to Dalkir (2005:5), knowledge management is the systematic coordination of people, technologies, processes and organizational structure in order to add value to the organization through the reuse of knowledge and innovation. Knowledge management (KM) has been introduced in the commercial as well as the business environments with the aim of attaining operational advantage. Its principles, and in particular knowledge sharing in this case, can assist libraries to improve performance and fulfill their mandate. Asogwa (2012:3) explained that knowledge-sharing initiatives in libraries become vital in harnessing the wealth, wisdom, expertise and experiences embedded in the heads of retiring employees. This can be achieved through brainstorming, open discussions and provision of suitable or conducive ground for

creativity, sharing of ideas, organizing workshops, conferences, mentoring, web archiving, digitizing, identification and collectively addressing problems and finding solutions (Asogwa 2012:3). Knowledge sharing requires the use of enabling technologies that include email, intranet, data mining, data warehousing, social media mechanisms (web 2.0) and other collaborative technologies (Bhojaraju 2005:37).

Hosseini and Hashempour (2012:138) explained that with the advent of modern information tools, users collaborate and participate more and share knowledge by means of web 2.0 tools. As a result of the professional nature of their work and their interaction with professors, students and researchers, academic librarians have to empower users with skills in the usage of modern information tools such as web 2.0 tools. Therefore, librarians using these tools will be able to share their knowledge with their colleagues in order to meet the needs of their users effectively and efficiently (Hosseini and Hashempour 2012:138). Knowledge sharing also requires the use of non-technological mechanisms such as mentoring, exit interviews, Communities of Practice (CoPs), job shadowing, storytelling and job rotation (Malinski 2002:673).

For Branin (as cited in Maponya 2004:16) expertise exists in people, and much of this type of knowledge is tacit, which makes it complicated to be shared. For any organisation therefore, to succeed with knowledge sharing, it should be aware of both the enablers that could assist knowledge sharing implementation as well as the impediments that could thwart its success. The critical success factors of knowledge sharing as mentioned by Islam, Ahmed, Hasan and Ahmed (2011:5902) are: trust, leadership, management support, organizational structure and rewards. The barriers of knowledge sharing on the other hand among others are: knowledge is power mentality, inequality in status and perceived lack of job security and lack of trust between organizational members.

1.1 Context of the study

According to Hundie (2001:149), the National University of Lesotho (NUL) was established in October 1975. It was established as Pius XII University of Basutoland, Bechuanaland protectorate and Swaziland in 1964, and after the independence of the three countries, it became the University of Botswana, Lesotho and Swaziland in 1966. Occupying the same premises as its predecessors, NUL is located at Roma, approximately 34 km southeast of Maseru, the capital of the Kingdom of Lesotho. The institution seeks to promote national advancement through innovative teaching, learning, research and professional services producing high caliber and responsible graduates who are able to serve their nation with diligence. All the activities partly depend on the services provided by the library (Hundie 2001:149).

The university library system consists of the main Thomas Mofolo Library (TML) which was named after the great Mosotho (a citizen of Lesotho) writer of the 19th century, as well as branch libraries on different campuses in Maseru such as the Institute of Extra Mural Studies (IEMS). The Library holds about 200,000 volumes of printed books on the open shelves and over 189,000 titles of documentation and archival records that are kept on closed access. There are 501 titles of bound and current serial items. Electronic resources range from an increasing number of licensed databases, to several others available through subscription, exchanges and free deposits. The nucleus of the University museum is steadily developing (Mariti 2006:49).

The entire collection of various conventional and non-conventional information-channeling formats is housed mainly at TML where the Online Public Access Catalogue (OPAC) describes and locates each of the items listed in the automated system. Although being

phased out gradually, a manual catalogue for the semi-catalogued materials exists concurrently with OPAC. Subject areas of all these materials focus on the information needs of clients as they pertain to the academic programs of NUL. Furthermore, the expressed information needs generally reflect programs and courses offered at NUL (Hundie 2001:150).

The Library provides services through three divisions according to Mariti (2006:49), namely the technical services; made up of the acquisitions, cataloguing, serials, e-resources, and bindery and automation sections. The second division consists of the client access (circulation and stacks), subject specialization and interlibrary loan section, as well as the last division consisting of the information literacy laboratory.

1.2 Statement of the problem

Knowledge sharing plays a vital role in organizational processes as it assists an organization in transferring new ideas or solutions (Tan Nya Ling 2011:335). When employees interact with each other for idea generation, it encourages the sharing of knowledge among them. According to Ramirez (2007:3) knowledge sharing enables employees to share their insights and experiences in order to allow faster and more cost-effective project completions. As organizations evolve and render services, their employees gain experience and knowledge about their domain, the competitive environment and the client requirements. As this body of knowledge grows, it becomes more valuable and develops the characteristics of an asset that needs to be nurtured and utilized. Organizations that value this asset tend to be more successful than those that have not yet recognized this fact (Bissick and Naicker 2013:1).

Ramirez (2007:3) suggested that in a knowledge-sharing environment, redundancy of work is decreased as employees are not recreating knowledge. In environments where knowledge sharing is not a norm, staff can become the sole owners of domain knowledge, meaning that this knowledge is typically lost when the employee leaves an organization. There will always be the risk that valuable knowledge could be lost to an organization that does not protect its knowledge through documented business processes (Bessick and Naicker 2013:1). Academic libraries can also benefit from the knowledge-sharing practice and yet little research has been devoted to specifically study how knowledge sharing could be applied in libraries (Tan Nya Ling 2011:335).

This study seeks to find out whether the existing knowledge is being effectively disseminated and shared among the librarians of TML. Librarians at TML have different sets of skills which, if combined, could improve service delivery. By not sharing and retaining this existing wealth of knowledge, it means when librarians retire or resign from work, they will certainly take the knowledge they possess with them. The result of this knowledge loss is that the library may be plagued with an inability to learn from past experiences, which leads to reinvented wheels, unlearned lessons and the pattern of repeated mistakes. According to Martins and Martins (2011:61), losing knowledge through retirements or resignations could reduce the availability of potential mentors for new employees. When people leave, efficiency is lost, which in turn leads to cost-cutting strategies, and simply adding more human resources is not a viable solution. When senior and knowledgeable people leave an organization, they could take with them knowledge that afforded the organization a competitive advantage, for instance, extensive personal relationships with decision-makers in major customer organizations (Martins and Martins 2011:61).

1.3 Aims and objectives of the study

The aim of this research is to find out if knowledge sharing is being used as a tool to improve service delivery in the National University of Lesotho Library. To attain this aim, the following objectives have been formulated:

- To determine the understanding of knowledge sharing at TML
- To identify knowledge sharing practices at TML
- To identify tools for sharing knowledge
- To identify the critical success factors of knowledge sharing
- To identify knowledge-sharing obstacles
- To make recommendations on how knowledge sharing at TML can be enhanced

1.4 Research questions

According to Maree (2007:30), the research question specifies what intrigues the researcher and focuses on what will be studied. It becomes the beacon that guides the researcher over months or years of a study to which the researcher strives to find answers. In practical terms, research questions are needed for at least the following two reasons.

A good research question directs the researcher to the appropriate literature sources. The question informs the researcher of what literature to study and narrows down the bibliographical search (Maree 2007:30). Another reason why the research question is needed as explained by Kumar (2005:112), is that it provides the researcher with a focus for data collection. In line with this, the study intends to utilize the following research questions:

- What tools are used for sharing knowledge?

- To what extent do librarians at TML share knowledge?

- What is the understanding of knowledge sharing at TML?

- What are the critical success factors for sharing knowledge?

- What obstacles are related to knowledge sharing?

1.5 Justification of the study

Research justification according to Given (2008:23) refers to the rationale for the research, or the reason why the research is being conducted, including an explanation for the design and methods employed in the research. Traditionally, in research conducted within any paradigm, researchers have been expected to provide an explanation of why the research is necessary. To explain the overall purpose, aims and objectives, a rationale is constructed and may illustrate how the research endeavor addresses gaps in the existing knowledge base, contributes a new dimension or perspective, or generates theory about a phenomenon that has not been explored previously (Given 2008:23).

Given the benefits arising from the successful knowledge-sharing initiative implementation, it is the researcher's argument that TML stands to gain very much from knowledge sharing. It is anticipated that this research study would assist the library in identifying barriers to sharing knowledge and recommending effective guidelines in implementing a knowledge-sharing environment. If well implemented, knowledge sharing, as one of the knowledge-management processes, may translate into improved service delivery at TML. This has been justified by Andriessen (2006:01) when he mentioned that in a knowledge-sharing environment, the products or services may be of higher quality.

While employees share their expertise with each other, they simultaneously learn from each other to fulfill the needs of their clients. The study, therefore, is necessary, as it will assist information professionals or librarians as drivers of knowledge sharing in TML to develop professionally as individuals in serving their clientele.

More importantly, the study seeks to fill the gap left by the previous studies that were aimed at improving service delivery at TML. While the focus of previous studies were on other aspects of improving service delivery such as equipment or technology, the focus of this study is using 'that which they already have' – their knowledge. For instance, in 2008 Taole (2008) conducted a study of the suitability of using the Innopac library management system to improve the service delivery of the Lesotho library consortium, of which TML is part.

Since the investigation seeks to find out if the application of knowledge-sharing enabling technologies and knowledge-oriented social factors may improve service delivery at TML, its findings could be used by researchers and practitioners to improve knowledge management implementation in similar organizations. The management of the University library may adopt the recommendations of the study, which are based on the research findings.

1.6 Significance of the study

Leedy and Omrod (2005:5) stated that when writing a significance of the study, the researcher wishes to present the reasons for doing the study, what is being studied and what the researcher hopes to achieve by completing the study.

The need to share organizational knowledge is a well-known concern for most organizations, including libraries. In fact, it has been argued that organizations that value

knowledge and share it tend to be more successful than those that have not yet recognized this fact (Bissick and Naicker 2013:1). This study is significant in that it will provide evidence of the use of knowledge sharing in an academic library and present the alternative means of improving service delivery at TML through the usage of what they already have – their knowledge. The research report of this study will also inform further studies on knowledge sharing.

1.7 Definition of terms

It is essential to explain the meaning of concepts when doing research because, as Ikoja-Odongo and Mostert (2006:145) put it, concepts form the basis for describing and explaining phenomena and the processes in a field of study. In the Information Science field in particular, several concepts used need to be understood in terms of the research context, as a variety of meanings can be attached to most concepts.

1.7.1 Data

According to Alavi and Leidner (2001:17), data is the representation of raw facts and numerical figures that have no context or meaning on their own.

1.7.2 Information

When the data is processed, organized and given structure, it becomes information (Abraham 1999:170).

1.7.3 Knowledge

Kebede (2010:417) said knowledge represents information with experience, insight and expertise.

1.7.4 Knowledge management

According to Uriarte (2008:13), knowledge management is the conversion of tacit knowledge into explicit knowledge and sharing it within the organization. For Dalkir (2005:3) knowledge management is the systematic coordination of people, technologies, processes and organizational structure in order to add value to the organization through the reuse of knowledge and innovation. This coordination is achieved by way of creation, sharing and application of knowledge.

1.7.5 Knowledge sharing

Okonedo and Popoola (2012:6) defined knowledge sharing as an activity of disseminating information, values and ideas about the perception between two parties to agree or disagree. Knowledge sharing enables employees to share their insight and experiences in order to allow for fast, efficient and effective provision of information services to their users.

1.7.6 Service delivery

Standing (2004:23) defined service delivery as a product or activity that meets the needs of the user or that can be applied by a user. According to the World Meteorological Organization (2012:4), services should possess the following attributes to be effective:

Available and timely: at time and space scales that the user needs

Dependable and reliable: delivered on time to the required user specification

Usable: presented in user-specific formats so that the client can fully understand

Useful: to respond appropriately to user needs

Credible: for the user to confidently apply to decision-making

Authentic: entitled to be acceptable by the stakeholders in the given decision contexts

Responsive and flexible: to the evolving user needs

Sustainable: affordable and consistent over time; and

Expandable: to be applicable to different kinds of services.

1.8 Research methodology

As Punch (2009:209) purports, research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it, researchers study the various steps that are generally adopted by a researcher in studying his research problem, along with the logic behind them. It is necessary for the researcher to know not only the research methods / techniques, but also the methodology. Generally, there are three types of research methodologies primarily used in the social sciences, namely qualitative, quantitative and mixed methods research (Punch 2009:209).

This study adopted the use of both qualitative and quantitative methods for soliciting views from the respondents. This combination has been used to cater for the weaknesses of one methodology over another. The weaknesses of the quantitative paradigm are found in the strengths of the qualitative paradigm and vice versa as suggested by Babbie (2010:77). Because social research is founded on the use of a single research method and as such may suffer from limitations associated with that method or from the specific application of it, multiple methods offer the prospect of enhanced confidence (Yeasmin and Rahman 2012:155). There is also a distinct tradition in the literature on social science research methods that advocates the use of multiple methods.

It has been argued that the deficiencies of any one method can be overcome by combining methods and thus capitalizing on their individual strengths (Yeasmin and

Rahman 2012:155). Hussein (2009:4) stated that both paradigms are designed to understand a particular subject area of interest and both have strengths and weaknesses. Thus, when both of them are used in one study there is great possibility of neutralizing the flaws of one method and strengthening the benefits of the other for better research results. Mavodza and Ngulube (2011:17) also used this methodology when exploring the use of knowledge management practices in an academic library in a changing information environment.

1.9 Population

For Bhattacherjee (2012:65), a population can be defined as all people or items (**unit of analysis**) with the characteristics that one wishes to study. The unit of analysis may be a person, group, organization, country, object or any other entity that one wishes to draw scientific inferences about. All 30 the staff members of TML formed the population of this study. However, only 25 questionnaires were administered to those who were available at the time, rendering a convenience sampling.

1.10 Data collection method

According to Kumar (2005:118), there are two major methods to gather information about a situation, person, problem or any given phenomenon. Sometimes, information required is already available and needs only to be extracted. However, there are times when the information must be collected. According to Babbie (2001:76), the studies in which the researchers collect new data through data collection tools such as interviews, questionnaires, observations or whatever methods are referred to as primary data designs. On the other hand, studies in which researchers use the existing data such as census data, or document and texts that were produced previously are called secondary

data studies. However, for this study the primary design was used. Data collection methods are dependent on the type of a research method used (Babbie 2001:76).

In addition to the extensive literature on knowledge sharing and its relevance to the library environment, self-administered questionnaires to all the librarians were used for data collection in this study. In order to gain more in-depth information and to do a follow-up on the answers in the questionnaires, semi-structured interviews were conducted with all the librarians. Institutional documents like previous studies were also reviewed. This multiple methods of data collection constitute what is called triangulation. According to Olsen (2004:3), triangulation is the mixing of data or methods so that diverse viewpoints or standpoints cast light on a topic. The integration of data types, which is known as data triangulation, is often to assist in validating the claims that might arise from the initial pilot study. The mixing of methodologies as in mixing the use of survey data and interviews is a more profound form of triangulation.

1.11 Data analysis and interpretation

The collection of data is followed by its analysis and interpretation. According to Mouton (1996:161), the term analysis basically means the resolution of a complex whole into its parts. In quantitative methods to research, analysis refers to the stage in the research process where the researcher, through the application of various statistical and mathematical techniques, focuses separately on specific data sets. According to Punch (2009:169), interpretation is the stage in the research process where the researcher tries to bring everything together, either by relating various individual findings to an existing theory of hypothesis, or by formulating a new hypothesis that would best account for the data. For Kumar (2005:73) data analysis is the systematic study of data so that its

meaning, structure, relationships, origins, etc. are understood. This is done in order to extract important information and draw conclusions.

After the collection of completed questionnaires, data was checked for completeness, comprehensibility, consistency and reliability, a step referred to as data cleaning. The purpose of data cleaning is to get rid of numerous problems that may arise during analysis. The data collected by means of questionnaires was processed using Microsoft Access and analyzed using the Statistical Package for Social Science (SPSS) software. The results of analysis were exported into Microsoft Excel for visual presentation and reporting of the results.

The data from the interview sessions was analyzed manually by content analysis, using the notes that were taken by the researcher from the respondents during the interview sessions.

1.12 Ethical considerations

When one decides to do any form of research, one of the most important steps is ethical considerations. According to Singleton (1993:474), ethics raise and answer the question of how to continue with research in a moral way. Bhattacherjee (2012:1370) explained research ethics as the moral distinction between right and wrong, and what is unethical may not necessarily be illegal. If applied, ethics may stop or restrict researchers from using experimental treatments that could harm research participants, from posing questions that would prove extremely embarrassing or threatening, from making the observations that would deceive or put research subjects under duress, and from reporting information that would constitute invasion of people's privacy.

The University of South Africa's (Unisa) policy on research ethics (2007:10) added that researchers should respect and protect the dignity, privacy and confidentiality of participants and should never expose them to procedures or risks not directly attached to the research project or its methodology. Research and the pursuit of knowledge should not be regarded as the supreme goal at the expense of participants' rights.

According to Bhattacherjee (2012:137), some of the expected tenets of ethical behavior that are widely accepted within the scientific community are as follows:

Voluntary participation and harmlessness: Subjects in research must be aware of the fact that their participation in the study is voluntary, that they have the freedom to withdraw from the study at any time without any unfavorable consequences, and they are not harmed as a result of their participation or non-participation in the project.

Anonymity and confidentiality: To protect subjects' interests and future well-being, their identity must be protected in a scientific study. This is done by using the dual principles of anonymity and confidentiality. Anonymity implies that the researcher or readers of the final research report or paper cannot identify a given response with a specific respondent. An example of anonymity in research is an email survey in which no identification numbers are used to trace who is responding to the survey and who is not.

In line with the Unisa Policy on research ethics (2007:10), it was important to notify the identified population before they were requested to participate, of the aims, methods, anticipated benefits of the research; their right to abstain from participation in the research and their right to terminate at any time; the confidential nature of their replies, and assure them of their privacy, and autonomy.

1.13 Scope and limitations of the study

Out of two (2) universities in the country, the study was undertaken in only one of these institutions. More so, this institution has satellite campuses but the study was only limited to the main campus of NUL (Roma). The focus of the study was on the public-funded institution and not the privately owned one. Taking into consideration the geographical terrain of the satellite campuses of the institution in which the research was undertaken, time and financing for the research did not allow the researcher to widen his scope.

1.14 Outline of the chapters

The study consists of five chapters. The first chapter (Chapter One) consists of the background of the study; the statement of the problem as well as the purpose of the study. The second chapter provides an understanding of the concept of knowledge sharing itself, as well as the knowledge-sharing practices as they pertain to the academic library, knowledge-sharing tools, the critical success factors of knowledge sharing and barriers to the sharing of knowledge. The third chapter discusses the research methodology as well as the design that has been employed in the study. The actual findings of this study, the analysis as well as the interpretation of data are discussed in Chapter Four. The last chapter (Chapter Five) provides the summary of major findings, conclusion and recommendations to the study.

1.15 Summary

This chapter introduced the research problem by providing the background. Because the main focus of the study is on the application of knowledge sharing for improved service delivery, the background emphasized the need and made a case for sharing knowledge in an academic library clearer. The chapter also provided the context to the statement of the problem and then looked further into the problem with the use of the objectives and the research questions. The contributions of this study to the existing literature and its significance are provided in this chapter. A brief discussion of research design, methodology, and data collection methods is given. Ethics are very important in any study and, therefore, it is important also in this research to uphold the use of ethics to a very high standard.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

Chapter One introduced the research problem. This chapter reviews the literature on the subject of knowledge sharing. The study begins with explaining why it is necessary to conduct a literature review. The main review of the literature is focused particularly on the following aspects: the concept of knowledge sharing itself and knowledge-sharing practices as they pertain to an academic library, knowledge-sharing tools, the critical success factors of knowledge sharing and barriers to the sharing of knowledge. The study will also discuss Nonaka and Takeuchi's theory of organizational knowledge sharing.

2.1 Role of literature review

Literature review is defined by Taylor and Procter (2005:1) as an account of what has been published on a topic by accredited scholars and researchers. The same sentiments were shared by Fink (as cited in Punch 2009:95) when he argued that a literature review is a systematic, explicit and reproducible method for identifying, evaluating and synthesizing the existing body of completed and recorded work produced by researchers, scholars and practitioners. Mavodza (2010:30) observed that it is very difficult to do research without any reference to other scholars.

For Randolph (2009:2), conducting a literature review is a means of demonstrating an author's knowledge about a particular field of study, including vocabulary, theories, key variables and phenomena, and its methods and history. Conducting a literature review also informs the student of the influential researchers and research groups in the field (Randolph 2009:2).

Boote and Beile (2005:4) said a substantive, thorough, sophisticated literature review is a precondition for doing substantive, thorough sophisticated research. Good research is important because it advances the collective understanding. A researcher or a student has to understand what has been done before, the strengths and weaknesses of available studies and what they mean (Boote and Beile 2005:4). A researcher cannot perform important research without first understanding the existing literature on the field (Boote and Beile 2005:4).

 In addition, Mertens (2010:90) explained that almost every research study begins with the review of literature. The purpose of the literature review section of research is to give the reader the overall framework for where the piece of work fits into the big picture of what is known about the topic from prior studies. Thus, the review of literature seeks to explain the topic of the research and to build a rationale for the problem being studied and the need for more research (Mertens 2010:90).

In the initial stages of research, literature review helps to establish the theoretical roots of the study, clarify ideas and develop one's methodology, but later on the literature review serves to enhance and consolidate the knowledge base and assist the researcher to integrate the findings with the existing body of knowledge (Kumar 2005:30). Leedy and Ormrod (2005:64) posited that the review of literature allows one to look again at what other researchers have done in areas that are similar, though not necessarily identical to one's own area of investigation.

Kumar (2005:30) identified the following as key functions of literature review in research:

- It provides a theoretical background to one's study.

- It assists one to establish the link between what one is proposing to examine and what has already been studied.

- Literature review enables one to show how one's findings have contributed to the existing body of knowledge in one's profession.

- It enables one to contextualize one's findings.

Cronin, Ryan and Coughlan (2008:38) identified four types of literature review, namely traditional or narrative, systematic, meta-analysis and meta-synthesis literature reviews. Narrative literature review analyzes and summarizes a body of literature and draws conclusions about the topic in question. Its primary purpose is to provide the reader with a comprehensive background for understanding current knowledge and highlighting the significance of new research. It can inspire research ideas by identifying gaps or inconsistencies in a body of knowledge, thus helping the researcher to determine or define research questions or hypotheses (Cronin, Ryan and Coughlan 2008:38).

According to Russell and Cynthia (2005:2) a systematic or integrative review of the literature is defined as one in which past research is summarized by drawing overall conclusions from many studies. Through the process of systematically analyzing and summarizing the research literature, a well-prepared integrative review can precisely represent the state of the current research literature. The integrative literature review can also be used to evaluate the strength of the scientific evidence, identify gaps in current research, identify the need for future research, build a bridge between related areas of work, identify central issues in an area, generate a research question, identify a theoretical or conceptual framework, and explore which research methods have been used successfully (Russell and Cynthia, 2005:2). Parahoo (2006:35) suggested that a

systematic review should detail the time frame within which the literature was selected, as well as the methods used to evaluate and synthesize findings of the studies in question. Meta-analysis is the statistical combination of the results of several studies into one pooled value and can be a useful way of reducing random error and increasing precision. Meta-analysis can be misleading unless it is performed in the context of a systematic review of the literature to avoid systematic biases (Cipriani and Geddes 2003:146). Meta-synthesis is the non-statistical technique used to integrate, evaluate and interpret the findings of multiple qualitative research studies. Such studies may be combined to identify their common core elements and themes. The review in this study is based on the narrative literature review.

2.2 Importance of knowledge

Knowledge is increasingly being recognized as a new strategic imperative in organizations. Nesheim and Gressgard (2014:29) added that knowledge is a critical resource for organizations and provides the basis for performance and competitive advantage. According to Al-Alawi, Al-Marzooqi and Mohammed (2007:24), while traditional economies used to rely on tangible assets such as land and capital, today's economy has evolved to treat knowledge as the primary production factor on which competitive advantage rests. The most important characteristics of knowledge are uniqueness and originality. Once created, knowledge cannot be imitated or substituted, which makes it a key strategic asset resource to all businesses (Cabrera and Cabrera 2002:280). In order to fully understand the knowledge-sharing process of knowledge management, it is important to first understand various types of knowledge, including tacit, explicit and organizational or cultural knowledge.

Taylor (2007:61) said the study of tacit knowledge originated from the philosophical work of Polanyi in 1996, who laid a theoretical foundation and coined the often-quoted phrase, "we can know more than we can tell". Tacit knowledge, according to Stover (2004:2), refers to the undocumented and unarticulated knowledge held by practitioners. In organizations, tacit knowledge is the personal knowledge used by members to perform their work and to make sense of their worlds (Choo 2000:395). It is learned through extended periods of experiencing and doing a task, during which the individual develops a feeling for, and a capacity to make an intuitive judgment about the successful execution of the activity (Choo 2000:395).

According to Mahroeian and Forozia (2012:304), the most important feature of the tacit knowledge approach is the fundamental principle that knowledge is basically individual in nature and is therefore complicated to extract from the minds of individuals. Tacit knowledge is achieved by internal individual processes like experience, reflection, internalization or talents. Crowley (2001:568) extended these definitions to include assertions that tacit knowledge is:

- Personal in origin;
- Valuable to the possessor;
- Job specific;
- Context related;
- Difficult to fully articulate;
- Both known in part and unknown in part to the possessor;
- Shared, where sharing is possible, through interpersonal contact;
- Operative at an organizational level;

- Capable of becoming explicit knowledge and vice versa;

- Intertwined with explicit knowledge along unstable knowledge borders; and

- Poorly reflected in contemporary knowledge literature.

According to Choo (2000:396), explicit knowledge is knowledge that is expressed formally by using a system of symbols and can, therefore, be easily communicated or diffused. Explicit knowledge may be object based or rule based. Object-based knowledge may be found in artifacts such as products, patents, software code, computer databases, technical drawings, tools, prototype, photographs, voice recordings, films and so on. Moreover, Sanchez (2004:6) noted that in contrast to the views held by the tacit knowledge approach, the explicit approach holds that knowledge is something that can be explained by individuals even though some effort and even some forms of assistance may sometimes be required to help individuals articulate what they know. As a result, the explicit-knowledge approach assumes that the useful knowledge of individuals in an organization can be articulated and made explicit (Sanchez, 2004:6). Uriarte (2008:6) posited that explicit knowledge is not completely separate from tacit knowledge. On the other hand, the two are mutually complementary. Without tacit knowledge, it will be difficult, if not impossible, to understand explicit knowledge.

Table 1: Comparison of properties of tacit vs explicit knowledge

Properties of tacit knowledge	Properties of explicit knowledge
Ability to adapt, to deal with new and exceptional situations	Ability to disseminate, to reproduce, to access, and to reapply throughout the organization
Expertise, know-how, know-why and care-why	Ability to teach, to train
Ability to collaborate, to share a vision, to transmit a culture	Ability to organize, to systematize; to translate a vision into a mission statement, into operational guidelines.
Coaching and mentoring to transfer experiential knowledge on one-on-one, face-to-face basis	Transfer of knowledge via products, services and documented processes

(Dalkir 2005:8)

According to Jones and Leonard (2009:27), knowledge is considered a valuable asset to organizations. Knowledge is the dominant and probably the only source of companies' competitive advantage. A paradigm shift has changed the way that knowledge is viewed. Employees used to stay at a company for their entire career lives. Now, however, employees are switching jobs several times (Jones and Leonard 2009:27) and when they leave an organization, they take their knowledge with them. Therefore, knowledge hoarding among individuals can hurt the company; while knowledge sharing and

collaboration can benefit the company by allowing the knowledge to stay within the company (Jones and Leonard 2009:27).

Taylor (2007:69) argued that organizational knowledge is embedded in its daily routines, routines that can be highly form specific, taken for granted and embedded in the organizational memory. Choo (2000:396) added that, over time, an organization develops shared believes about the nature of its main business, core capabilities, markets, competitors and so on.

2.3 Knowledge sharing

Maponya (2004:16) said expertise exists in people, and much of this kind of knowledge is tacit rather than explicit, which makes it difficult to be shared. At its most basic, knowledge sharing is simply about transferring the dispersed expertise of organizational members more effectively (Maponya 2004:16). McDermott and O'Dell (2001:78) noted that sharing someone's knowledge involves a person guiding someone else through their thinking or using their insights to help others see their own situation better. Furthermore, the person who shares and distributes knowledge ideally is, or should be, aware of the knowledge purpose, use, needs or gaps of the person receiving the knowledge. This implies that not all employees need to share knowledge, because it would not be re-used or applied (McDermott and O'Dell 2001:78).

Asogwa (2012:6) added that knowledge sharing is based on the experiences gained internally and externally in an organization. Internally, it is shared during staff meetings, seminars, workshops, orientations committees and board meetings.

Okonedo and Popoola (2012:6) said knowledge sharing is of central importance to librarians in academic institutions. Knowledge sharing enables employees (including librarians) to share their insight and experiences in order to allow for fast, efficient and effective provision of information services to their users. Asogwa (2012:6) suggested that the expertise and know-how of librarians should be valued and shared through meetings, conferences seminars in which the outcome is documented. This is why it is vital that knowledge should be shared and distributed within an organization so that isolated information or experience can be used by the whole company. Making this expertise accessible to other librarians will eliminate or reduce duplication of efforts and form the basis for problem-solving and decision-making (Asogwa 2012:6).

Abell and Oxbow (2001:58) argued that the productivity of knowledge depends on how people share their competence with those who can use it. Hence, Townley (2001:56) emphasized that if the tacit knowledge about users held by reference librarians could be shared with systems personnel, for example, a more effective library home page would result. Hence, since the tacit knowledge resides in the minds of individuals, in their skills, experiences and judgments, it is often difficult to document it because people often feel that sharing what they know will make them expendable or that their knowledge on any given subject is what makes them unique (Naikal and Paloti 2005:6).

According to Stam (as cited in Hana and Lucie 2011:85), organizations (regardless of the economy sector, size of the organization, etc.) are facing a crisis of knowledge sharing which is to ensure that staff do not leave the organization before transferring their experience.

It then follows that, each time an employee resigns, he takes what he knows with him. However, if tacit knowledge is shared among employees, it ensures that important employees' knowledge stays in the organization long after the employees left the company (Naikal and Paloti 2005:6).

In the current times of continual change, the success of any organization lies in its new knowledge in order to outlive or outlast the competition (Stafford and Mearns 2009:1). Wang and Noe (2010:115) noted that knowledge sharing between employees and within and across teams allows organizations to exploit and capitalize on knowledge-based resources. On that note, Davenport (as cited in Maponya 2004:16) observed that, in reality, distribution and sharing knowledge is not an easy task. However, it is important for organizations to motivate why knowledge should be shared. The importance of knowledge sharing should be based on the capability of academic librarians to identify, integrate and acquire external knowledge. This should include knowledge denoting library practices, users and operational capabilities (Maponya 2004:16).

Shahong (as cited in Sarrafzadeh 2005:96) stated that making the best use of resources is essential in knowledge sharing. Therefore, digitizing libraries' resources and moving toward digital and hybrid libraries is one of the most important steps towards knowledge-sharing implementation in libraries which facilitates the use of resources. Great efforts should be made to transform all the available large non-electronic information resources into electronic information and integrate them into electronic libraries.

McElroy (as cited in Islam et al, 2011:5901) explained that in literature knowledge sharing is used in two ways. Some authors consider knowledge sharing as part of exploitation and others consider it as part of the exploration phase. Exploitation refers to the process

where existing knowledge is captured, transferred and used in other similar situations. Exploration, on the other hand, has to do with the processes where knowledge is shared, synthesized and new knowledge is created (McElroy, as cited in Islam et al, 2011:5901). In the context of this study, knowledge sharing refers to the process of exchanging ideas with the aim of improving the organizational performance.

2.3.1 The theory of organizational knowledge sharing

According to Babbie (in Mckechnie and Pettigre 2002:407), a theory is a systematic explanation for the observed facts and laws that relate to a particular aspect of life. And, with reference to Library and Information Science (LIS) theory, an "explanation of information systems efficiency, of user behavior, of the function of different search agents such as descriptors, citation, titles, and so on (Hjorland 1998:607). Theories provide comprehensive conceptual understandings of issues being studied, such as how organizations operate, why people interact in certain ways. Pettigrew and McKechnie (2001:62) added that, today, having a theory is the mark of research seriousness and respectability. Theories give researchers different perceptions through which to look at complex aspects and social issues, focusing their attention on different aspects of the data and providing a framework within which to conduct their analysis (Peterson 2012:35).

This study is based on Nonaka and Takeuchi' s theory of organizational knowledge conversion which views the interaction processes of tacit and explicit knowledge as a vital feature in knowledge sharing. Basically, Nonaka and Takeuchi's theory is about how to create organizational knowledge, how to share it, how to convert knowledge from one type to another and how to manage organizational knowledge (Peterson 2012:41).

This theory identifies tacit to tacit (socialization), explicit to tacit (internalization), tacit to explicit (externalization) and explicit to explicit (combination) as the four modes of interaction that facilitate knowledge sharing in an organization. According to Peterson (2012:40), the conversion of knowledge from one form to another, results in dissemination and circulation of knowledge within the organizational system. Senior workers and experts share their knowledge with juniors and new entrants. The sharing of knowledge and experiences means that when retirees leave, they leave the organization but their knowledge is retained by new and young employees who remain behind. A brief discussion of the four knowledge conversion modes is provided below.

2.3.1.1 Socialization

Socialization, according to Uriarte (2008:7), is a process of creating common tacit knowledge through shared experiences. In socialization, a field of interaction is built where individuals share experiences and space at the same time. Nonaka (1994:19) explained that without some form of shared experience, it is extremely difficult for people to share each other's thinking processes. The tacit knowledge of one person is shared and transmitted to another person and it becomes part of the other person's tacit knowledge (Uriarte 2008:7). One important point to note regarding socialization according to Nonaka (1994:19) is that an individual can acquire tacit knowledge without language. For instance, apprentices work with their mentors and learn craftsmanship not through language, but by observation, imitation and practice. In a business setting, on-the-job training (OJT) uses the same principle (Nonaka 1994:19).

2.3.1.2 Internalization

Internalization is the process of embodying explicit knowledge into tacit knowledge or an individual's expertise or operational knowledge. An example of this is learning by doing or

using. Practically, Nonaka and Konno (1998:45) argued that internalization relies on two dimensions. Firstly, explicit knowledge has to be embodied in action and practice. Thus, the process of internalizing explicit knowledge actualizes concepts or methods about strategy, tactics, innovation, or improvement. For instance, training programs in larger organizations help the trainees to understand the organization and themselves as a whole. Secondly, there is a process of embodying the explicit knowledge by using simulations or experiments to trigger learning by doing processes. New concepts or methods can thus be learned in virtual situations (Nonaka and Konno, 1998:45).

2.3.1.3 Externalization

According to Uriarte (2008:8) externalization is the process of articulating tacit knowledge into such explicit knowledge as concepts and/or sketches. This mode is triggered by a dialogue intended to create concepts from tacit knowledge. An example of externalization is the process of creating a new product concept or developing a new product process. Here the tacit knowledge in the minds of experts is articulated and expressed as concepts or drawings, thus becoming explicit knowledge that can be further studied and refined (Nonaka and Toyama 2003:5).

2.3.1.4 Combination

According Binz-Scharf (2003:37), combination ties together different bodies of explicit knowledge held by individuals through processes such as meetings, telephone conversations and document exchanges. Nonaka and Takeuchi (1995:67) concurred with Binz-Scharf and asserted that combination involves combining different bodies of explicit knowledge. This is done by individuals exchanging and combining this knowledge in the form of documents, etc. Here, explicit knowledge is converted into explicit knowledge.

This combining and processing of explicit knowledge is likely to lead to more complex and systematic knowledge (Nonaka and Toyama 2003:5).

2.4 Knowledge sharing practices

According to Mavodza and Ngulube (2012:2), knowledge sharing practices are all the actions that are aimed at improving the internal flow and the use of knowledge for institutional effectiveness. Organizational knowledge-sharing practices deal with transfer or exchange of knowledge among individuals or groups of individuals in an organization. Persons working in organizations are linked to sources of external knowledge due to these knowledge-sharing practices (Mahmood, Ahmad and Hussan 2011:24). From the definition given, it appears that a remarkable contribution of knowledge sharing is improving the quality of service delivery of an organization, particularly more service oriented rather than producing goods as their products (Ismail and Yusof 2010:1). Calantone, Cavusgil and Zhao (2002:520) said that organizational knowledge-sharing practices facilitate knowledge sharing because they are initiated and implemented to diffuse knowledge and individual learning within organizations.

Cabrera and Cabrera (2010:8) suggested that, given the predicted impact of the perceived benefits of knowledge sharing, performance appraisal and compensation systems must be designed to encourage knowledge-sharing behaviors. Furthermore, Noe, Colquitt, Simmering and Alvarez (2003:209) argued that trust, or willingness to be vulnerable to another party, is needed for persons to be open to the exchange of information. Similarly, norms of openness teamwork, cooperation and experimentation facilitate the exchange and value of information (De Long and Fahey, 2000:121). Organizational knowledge-sharing practices also include training and development and

mentoring programs which equip employees with idiosyncratic knowledge that is more valuable to the organization than to its competitors (Hsu 2008:1319). Cabrera and Cabrera (2010:7) concurred with Hsu and added that training in team building should increase levels of structural, cognitive and relational social capital that will also help to stimulate knowledge sharing behaviors.

Calantone et al, (2002:517) proposed that an organization should disseminate lessons learned from past failures to its members. An organization can also use an interdependent arrangement such as work teams to enhance and exchange tacit knowledge and expertise (Hsu, 2008:1319). Another organizational knowledge sharing is action learning. Action learning according to Noe et al, (2003:218) involves giving teams a real business problem or issue to work on, having them work on solving it and commit to an action plan, and then holding them accountable for carrying out the plan. Action learning is a good method for generating intellectual capital and sharing tacit knowledge because employees are required to work together, share their perspectives and expertise, seek out resources, and report back to the team what they have learned (Noe et al, 2003:218).

According to the expectancy theory, the intentions to perform a certain action are partially determined by consequence expectation. The more positive a person perceives the outcomes to be associated with a given action, the more inclined that person will be to perform that action (Cabrera, Collins and Salgado 2006:250). Therefore, sharing knowledge may be partially determined by rewards that an employee perceives are associates with such behavior (Cabrera et al, 2006:250). Desouza and Awazu (as cited in Ramirez 2007:7) identified the need for incentives to motivate employees to share their knowledge, rather than hoarding it. Iqbal, Toulson and Tweed (2012:3) added that a

reward system is one of the main components of human resource management practices that can enhance employee motivation to share knowledge with others for innovative purposes. Another organizational knowledge-sharing practice is work design. Cabrera and Cabrera (2010:5) posited that work design directly affects the structural dimension of social capital by establishing interdependencies, frequency of interactions and information flow requirements among jobs.

Maponya (2004:16) stated that, when it comes to libraries, it can be noted that a great deal of knowledge sharing is entirely uncoordinated and any sharing of information and knowledge has been on an informal basis and usually based on conversation. Parirokh (2008:119) concurred with Maponya on the formalisation of knowledge sharing in academic libraries when he posited that academic libraries do not generally have specific knowledge management policies and strategies in place. But as Maponya (2004:16) suggested, to find out if indeed there is any form of knowledge sharing occurring in libraries, the following questions need to be asked; are academic librarians encouraged to share knowledge? Are the skills and competencies in the academic library identified and shared? How is the knowledge shared? Does the working environment support a knowledge-sharing culture? On that note, Davenport, De Long and Beers (1998:53) argued that if the cultural soil is not fertile for a knowledge project, no amount of technology, knowledge content or good project management practices would make the effort successful.

De long and Fahey (2000:115) suggested that at the deepest level, culture consists of values that are embedded, tacit preferences to which the organization should strive to attain and how it should do so (De long and Fahey 2000:115). Ramirez (2007:10) said a

culture of knowledge sharing can be described as one where people share openly, where individuals are willing to teach and mentor others, where ideas are freely challenged, and where knowledge gained from various sources is utilized.

De Long and Fahey (2000:121) identified a number of cultural based knowledge-sharing practices in organizations, including interactivity and approachability.

Interactivity

Culture determines the pattern of interaction used to accomplish work. For example, norms and practices that bring people together vary from one organization to another. One traditional firm may rely on formal communication processes and meetings designed to bring individuals together periodically, while a more entrepreneurial internet startup expects frequent, unplanned and unstructured interactions among employees. In these organizations, formal and informal interactions are valued differently, which results in different patterns of knowledge creation and sharing.

Approachability

Norms and practices that make executives accessible and approachable help create a context for effective knowledge sharing. On the other hand, cultures with norms and practices that discourage open and frank exchanges between levels in the hierarchy create a context for communication that undermines effective knowledge sharing.

However, instances of the successful application of knowledge sharing in academic libraries have also been reported in the literature. Jantz (2001:33) refers to a knowledge-sharing initiative at the New Brunswick branch of the Rugters University libraries in New Jersey, United States of America. The New Brunswick libraries consist of several smaller

libraries in various locations. Their team of reference librarians decided to create a tool, known as the common knowledge database that enables the management and use of the knowledge embedded in their employees' minds. Thus, the two major objectives of this database are:

- To enable the acquisition and sharing of informal knowledge in order to improve reference librarianship, and

- To facilitate, through improved communications, the organizational goal of becoming one New Brunswick library system (Jantz, 2005:35). The database therefore also serves as a learning tool not only for new librarians, but also for making certain that knowledge possessed by a few individuals is shared among all. The database is also updated periodically to ensure that the information remains relevant, although Jantz (2001:39) does acknowledge that there are many challenges to acquiring, encoding and providing tacit knowledge due to its elusive nature.

2.5 Knowledge-sharing tools

Knowledge sharing has been defined as an activity that facilitates the flow of knowledge in organizations. Such knowledge flows may include interactions of individuals or making reference to codified knowledge (Bou-Liusar and Segarra-Cipres 2006:100). Knowledge-sharing tools include those human and technological based.

2.5.1 Human-based tools

Human-based knowledge-sharing tools refer to the type of knowledge sharing which involves personal or "face-to-face" interaction. This is also in particular about the

organizational conditions that foster the development of different people-focused knowledge-sharing initiatives (Aramburu and Saenz 2011:186). The human-based organizational knowledge-sharing tools discussed on this study are the following: mentoring, job shadowing, storytelling, job rotation, and communities of practice.

2.5.1.1 Mentoring

DeGrandpre (2009:1) defined mentoring as an explicit one-on-one learning relationship between someone who wants to improve his job or career skills and someone who can assist her do that. The mentee could be a newly hired person or a skilled employee. The mentor is not merely someone who provides answers. In addition, Abbajay (2013:1) said mentoring is one of the oldest forms of influence and knowledge sharing. It started with the ancient Greeks; mentor was Odysseu's trusted counselor and advisor.

The mentor invests in the mentee's development. She shares knowledge, encouragement, guidance and feedback and she advocates for the mentee's success. The mentoring relationship extends over time, changing with the increasing experience and confidence of the mentee. In a rich workplace mentoring culture, people are likely to be mentors and mentees at the same time. Mentoring crosses functional and hierarchical boundaries. Sharing knowledge is the norm. People are eager to teach and eager to learn (DeGrandpre 2009:1).

Peariasamy and Mansor (2008:91) confirmed that training and mentoring within a department could be one-way in that an employee shares knowledge with other employees. A mentor might use a variety of approaches such as coaching, training, discussion and counseling to transfer his or her best practices. The process of mentoring

is more a process of encouraging experienced workers to share their knowledge with those who are less experienced as well as encouraging them to take further training.

2.5.1.2 Job shadowing

Hackert (2013:21) defined job shadowing as a process where an inexperienced employee is paired with an experienced employee with the desired skills or position to transfer knowledge. Knowledge is shared in dealing with everyday problems, in addition to the most difficult situations. Job shadowing provides the individual with an opportunity to find out how other staff work and what their roles involve. It develops a deeper knowledge and understanding of other roles and functions in an organization (Hackert 2013:21).

Bragg (2014:10) argued that the concept could also be used to gain expertise in certain specific areas. For example, a junior manager might shadow a more senior management person during labor negotiations in order to learn more about the process. Similarly, a specialist could shadow a more senior person in order to learn more about a specific technical skill.

These shadowing assignments tend to be of short duration, lasting only until the necessary knowledge has been transferred. A considerable benefit of job shadowing is its efficiency, where an employee can gain an understanding of a position within a relatively short period of time, thereby avoiding what might otherwise have been years of effort to arrive at a position and then find that she does not like the work (Bragg 2014:10).

2.5.1.3 Storytelling

Another knowledge-sharing technique used by organizations is storytelling. According to Sole (2002:1), storytelling is an ancient and traditional way of passing on complex, multi-

dimensional information and ideas through mechanism and story-telling narrative. Of course, stories have many purposes and styles and of particular interest here are knowledge-sharing stories. Knowledge-sharing stories convey in a holistic form, all the essential details of a critical or exemplary situation both in information and emotion, both the explicit and the tacit, both the core and the peripheral context. Well-designed, well-told stories can help others learn from past situations to respond more effectively in future situations (Sole 2002:2).

Snowden (2002:32) differentiated between two kinds of storytelling: storytelling as a knowledge disclosure to create meaning and understanding. Storytelling as a mechanism for disclosing knowledge can be a helpful tool to get hold of the valuable tacit knowledge members of the organization. It creates a self-sustaining, low-cost means by which knowledge can be captured on an ongoing basis. Storytelling to create meaning and understanding creates metaphors to transfer knowledge in a more transparent way (Snowden 2002:32).

2.5.1.4 Job rotation

Job rotation can be defined as working at different tasks or in different positions for set periods of time in a planned way using lateral transfers aiming to allow employees to gain a range of knowledge, skills and competencies and is also seen as an on-the-job training technique (Kaymaz 2010:69). Peariasamy and Mansor (2008:93) argued that many organizations are now concerned about their employees being so called "multi-taskers". Their concern is based on the premise that multitasking is good for organizational development. The name multi-tasking is given to an employee who is able to handle many jobs outside his or her job scope. Such person is able to do any job that is assigned

to him and this gives the management more confidence that the person can be depended on even when other employees are not around. Moreover, having employees with multi-tasking capabilities is an asset to the organization because this, at the same time, reduces the need for more manpower (Peariasamy 2008:93). For Malinski (2002:673), job rotation comes in many forms and is useful in many situations. Job rotation is the systematic movement of employees from one job to another. How this movement is accomplished depends on the motive the management wishes to achieve.

2.5.1.5 Communities of practice

Communities of practice (CoPs) are collaborative, interactive networks of individuals within a generally defined topic of knowledge. CoPs arose as a tool to facilitate knowledge sharing in a learning environment. CoPs have become a feature of the knowledge-management literature in recent years as their applications to business have received greater attention (Hinton 2003:6).

To define a CoP, Wenger (as cited in Cummings 2014:6) argued that three characteristics are crucial: the domain, the community and the practice.

The domain

A community of practice has an identity defined by a shared domain of interest. Membership, therefore, implies a commitment to the domain, and a shared competence that distinguishes members from other people. Members value their collective competence and learn from each other, even though few people outside the group may value or even recognize their expertise.

The community

Within their domain of interest, members engage in joint activities and discussions, help each other, and share information. They build relationships that enable them to learn from each other. However, members of a CoP do not necessarily work together on a daily basis.

The practice

A CoP is not merely a community of interest, for example, people who like certain kinds of films. Key to the paradigm is the fact that members of a CoP are practitioners who develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems, namely a shared practice. Developing these resources takes time and sustained interaction. Van de Berg and Snyman (2003:3) said CoPs are formed to share what is known about some aspects of the work and to learn from each other. Groups that have similar goals or interests benefit from sharing best practices, past experiences, insights and knowledge.

CoPs working on company projects and initiatives share both tacit and explicit knowledge by taking information and materials and refining them to a point where they can become corporate positions on topics (Peterson 2012:93). In order to pursue their interests, members of the CoP engage in joint activities and discussions, and share information. Their relationship helps to learn from each other. Because members of a community of practice are practitioners – they develop a shared practice. Communities of practice are found everywhere and come in different forms and sizes (Peterson 2012:93).

CoPs can provide a social container for linking and learning between practitioners, knowledge producers and policy processes to analyze, address and explore solutions to

problems (Hearn and White 2009:2). They can bring together a range of perspectives on a problem and ensure that relevant knowledge is accessible to those who need it. This is far more than the exchange of knowledge. It is about the making sense of and the interpretation of knowledge within the members' specific contexts. It is about their ability to use knowledge, reject it or improve upon it (Hearn and White 2009:2).

2.5.2 Technology-based tools

Kiplang'at and Ocholla (2005:234) defined ICTs as the electronic means of capturing, processing, storing and communicating information and these ICTs include digital information, computer hardware, software and networks, and analogue-based information such as radio, television and telephone. Holbeche (2005:162) maintained that as knowledge is generated, it is captured and made accessible to others through IT systems. Knowledge sharing has become an increasingly important knowledge-management aspect. However, the ultimate goal of sharing knowledge is the right content to the right people at the right time. In order to accomplish this goal, different organizations employ different knowledge-sharing technologies (Holbeche 2005:162).

Desouza and Awazu (2003:102) argued that ICT infrastructures can overcome geographical boundaries enabling employees to benefit from the expertise of employees in other parts of the organization anywhere in the world. Moreover, Ramirez (2007:12) suggested that the development of knowledge maps (an ICT tool) can make employees find individuals that possess the expertise that they are seeking in trying to solve their problem.

The role of information technology as a key enabler of knowledge-sharing activities in an organization remains undiminished. In fact, Shanhong (2000:5) argued that the

application of information technologies enlarges the scope of knowledge acquisition, which is a key process in managing knowledge. It is impossible to accomplish such important tasks by using the human brain alone in a society in which knowledge keeps on changing. In essence, information and communication technology should be seen as a tool to assist the process of knowledge sharing in organizations (Shanhong, 2000:5). Additionally, Akamavi and Kimble (2005:5) claimed that ICT would play a vital role in knowledge sharing as it helps to overcome the barrier of time and space that would have been the limiting factors. Therefore, some of the ITCs that can enhance knowledge sharing are listed and discussed below:

2.5.2.1 Internet

According to Gosh and Avasia (2002:461), the internet is a global network connecting millions of computers. The internet is playing an important role in changing the library system as well as the way in which people see the library resources and library services. With the help of the web-based library services, users are attended to around the clock. The internet provides links to different library sites specializing in every topic and they can be accessed anywhere from the world (Avasia and Ghosh 2002:461). The internet provides extensive pathways for sharing knowledge because of its simplicity and ubiquitous presence (Saharabudhe 2001:271). Clients use the internet to request information from a particular web server and the server sends the requested information back to the client over the internet (Laudon and Laudon 2007:221).

2.5.2.2 Intranet

An intranet, according to Parks (as cited in Mphidi 2007:34), is a private computer network that uses internet concepts and technologies within an organization to be

accessed by employees in order to share knowledge. The type of knowledge on the intranet is password protected. Averweg (2008:2) stated that the intranet is a common feature in many organizations. With the increasing use of a technology infrastructure in organizations, there is a continued challenge for employees in an organization to contribute their knowledge willingly and to make use of knowledge sharing among employees. Increasingly, intranets are being used to deliver tools and applications like collaboration to facilitate working in groups and teleconferencing for sharing knowledge or sophisticated corporate directories, sales and customer relationship management tools and project management, to advance productivity (Mphindiwa 2010:3). Tiwana and Ramesh (2001:35) contend that the intranet is well suited for use as a strategic tool within the domain of KM owing to its ability to support distribution, connectivity and publishing. According to these authors, the intranet should be seen as integral to an organization's KM strategy and should therefore be designed and tailored to enhance an organization's knowledge-sharing activities.

Intranets create a common communications and information-sharing system. Brelade and Harman (as cited in Averweg 2008:3) suggested 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. These mechanisms are described more fully as follows:

- 'Push' technology is used when it is important that certain material be presented to employees at their workstations. It ensures that no other function takes place until all the information is correctly accessed.

- 'Pull' technology allows employees to decide when to pull down information that they wish to view from the intranet. The 'views of the end users are more important than in most other studies' (Skok and Kalmanovitch 2005:736).

2.5.2.3 Email

Sitarski (2010: 117) explained that an email system comprises transmitting messages electronically on the computer networks. Increasing access to email via the net has gone beyond borders. Email can be a very powerful tool for transferring tacit knowledge. Laudon and Laudon (2007:220) added that through this technological channel, an individual can share knowledge with one or more people by routing and/or forwarding a message using a distribution list. Besides messages, an e-mail has capabilities for attaching text documents or multimedia files to messages (Laudon and Laudon 2007:220).

2.5.2.4 Videoconferencing

Videoconferencing may be one of the fasted growing aspects of the computer industry. It allows participants to share knowledge while, at the same time, having a visual contact with each other. The sufficiently high-speed connections in order to share knowledge are vital in this regard (Sahasrabudhe, 2001:280). A videoconference allows a CoP to share knowledge and have visual contact with each other, which is how many individuals across the world can participate in sharing knowledge through videoconferencing (Saharabudhe 2001:275).

2.5.2.5 Wikis

Hassandoust (2012:21) explained a wiki as a service that enables people to add, modify or delete content in a collaborative environment. Knowledge sharing via wiki is often focusing more on knowledge creation than just simple information sharing. Usually, the content in a wiki is being commented, adapted, modified and joint knowledge is being created. Lyn Grace (2009:65) posited that Ward Cunningham, dubbed as the father of wikis, started the world's first wiki in 1995. Wikis evolved from an open source and Usenet philosophies and community tenets, and is the most current iteration of user-driven tools, resources and power. One of the best-known examples of wikis is the Wikipedia. Characteristics of wikis according to Lyn Grace (2009:65) are:

- Easy editing as users are not required to know HTML or scripting languages;

- Links and references to other websites that are related to terms mentioned in the wiki, to help visitors better understand the context;

- Change tracking, often at the individual line, word or even character, creating a very detailed audit trail of who changed what; and

- Built-in search function.

2.5.2.6 LinkedIn

According to Hart (2013), LinkedIn is a social networking for people in professional occupations where people contact others, generally, with a professional aim rather than a personal aim. In general, the users create their expanded CVs and decide to belong to the different groups. Communities or clusters can create their own pages where they share the information and users may become members of the community or just follow the community in order to be aware of the latest information.

2.5.2.7 Facebook

Facebook is the largest social networking site with nearly a billion members. This website enables people to make connections, share interests and join groups. The community creates the page to Facebook with the aim of sharing information/resources with the followers of their community page. A page can be created by focusing only on own community or on a wider audience. By focusing on the community's internal communication, the specific information is shared only with the members.

2.5.2.8 Blog

Dorn and Sahinyan (2011:12) defined a blog as a website that is highly structured as it contains dated entries in reverse chronological order (most recent first) about a particular topic. The term was derived from 'weblog' – a term that indicates an entry on a website (Ramirez 2007:12). Blogs are easy to create, maintain and use and thus reduce the technical skills required from the users to exploit its features. Functioning as an online journal, blogs can be written by one person or by a group of contributors, offering the possibility to make knowledge available to a wide range of users (Godwin-Jones 2003:14).

Ramirez (2007:12) added that blogging is a form of amateur journalism; therefore, blogs often provide commentary or news on a particular subject while others function as personal diaries. Furthermore, blogs are becoming much more common, as businesses, politicians, policy makers and even libraries and library associations have begun to blog as a way of communicating with their patrons and constituents (Dalkir 2005:223).

Blogs engage people in knowledge sharing, co-constructing knowledge, reflection and debate. These activities are possible through asynchronous communication through

posting commentaries, availability of knowledge through archives of previous posts, as well as links to various other information resources (Boulos, Maramba and Wheeler 2006:10).

2.6 Critical success factors of knowledge sharing

Peterson (2012:92) noted that the loss of organizational knowledge can be controlled by employing a variety of knowledge retention mechanisms to capture knowledge and information in an organization. These knowledge retention mechanisms include the following: trust, communication, leadership, management support, and organizational structure and reward system (Islam, Ahmed, Hasan and Ahmed 2011:5902).

2.6.1 Trust

Islam, Ahmed, Hasan and Ahmed (2011:5902) defined trust as a set of beliefs about the other party (trustee), which leads to one (truster) to believe that the trustee's actions will have fruitful effects for the trustor's self. According to Tan Nya Ling (2011:3290), despite the fact that knowledge sharing is important, workers are still skeptical of those they have to share knowledge with. In addition, Ngulube (2005:54) added that lack of trust among employees may be inimical to knowledge sharing in an organization. He argued that members of an organization need to trust one another to be honest, capable and committed to joint aims in order to create and share knowledge.

To create an environment where there is trust, an employee needs to be assured that his or her knowledge will not be misused and that he or she will obtain significant value in the near future (Tan Nya Ling, 2011:3290).Tan Nya Ling, Ying San and Hock (2009:139) observed that in today's knowledge economy, scholars and researchers have placed trust

as an important facilitator and determinant in a knowledge-sharing culture as employees require the existence of trust in order to respond openly and to share knowledge. A culture of trust seems to be required to encourage the application and development of knowledge within an organization. Therefore, trust in the context of culture leads to the increased overall knowledge sharing within organizations (Tan Nya Ling, Ying San and Hock 2009:139).

Javadi, Zadeh, Zandi and Yavarian (2013:212) identified elements in the definition of trust: ability, benevolence and trusteeship. Ability is a set of skills, competencies and features that enables a group to influence on a particular field. Benevolent is the extent to which a dependable person wants to do good things for a confiding person (the person who trusts) with no motivation of profit. Trusteeship means the confiding perception of a dependable person means that how much he or she is committed to principles accepted by confiding person (Javadi, Zadeh, Zandi and Yavarian 2013:212). Other researchers such as Davenport and Prusak (as mentioned in Islam et al, 2011:5903) found that if distrust is present in an organization, knowledge management cannot, and will not, succeed because when fear is present, people will not contribute in sharing critical information and will be suspicious of their organization's true intentions.

2.6.2 Communication within the organization

Communication refers to the human interactions through oral conversations and the use of body language while communicating. Al-Alawi (as cited in Islam et al, 2011: 5902) noted that interaction between colleagues is facilitated by the existence of social networking in the organization. Communication contributes to knowledge sharing as it is related to trust in different inter-organizational relationships.

Davenport and Prusak (1997:120) stated that organizations that encourage knowledge sharing and knowledge integrating into the organization create a floor for open discussion and debate and this motivates individuals at various levels to freely give their opinions and views on different issues. Additionally, Ramirez suggested that organizations should establish opportunities for interaction between its employees. Organizations that encourage open discussions between employees can make knowledge sharing easy and successful, create new knowledge and reduce the costs of trial-and-error (Al-Alawi, Al-Marzooqi, Mohammed 2007:25).

2.6.3 Management support

Connelly and Kelloway (2003:297) suggested that management support for knowledge sharing has been shown to be positively associated with employees' perceptions of a knowledge-sharing culture and willingness to share knowledge. Lee, Kim and Kim (2006:217) found that top management support affected both the level and quality of knowledge sharing by influencing employee commitment to knowledge management. Hsu (2008:1319), meanwhile, observed that the values held by top management advocate how organizational members should conduct themselves, how they should run the business, and what kind of organization they should build. Perceived supervisor and coworker support and their encouragement of knowledge sharing also increase employees' knowledge exchange and their perceptions of usefulness of knowledge sharing (Cabrera et al, 2006:250).

King and Marks (2008:140), however, failed to find a significant effect of perceived organizational support after controlling for ease of use and usefulness of knowledge management system (KMS). It appears that management support specific to knowledge

sharing is a better predictor of employee knowledge sharing. They found that supervisory control (i.e. perceived supervisor influence over utilizing the KMS in the organization appropriately) was a significant predictor of individual effort, which was related to the frequency of knowledge sharing (King and Marks 2008:140). Overall, these studies show that management support is likely to influence knowledge sharing. One way in which management can show support for knowledge sharing is by the provision of rewards. In this regard, Iqbal, Toulson and Tweed (2012:3) opined that rewards, promotions and recognition should be given to those employees who spend their time facilitating and working with other staff, especially in a knowledge-based collaboration.

2.6.4 Reward system

To this end, Arzi, Rabanifard, Nassajtarshizi and Omran (2013:5) and Wang and Noe (2010:118) contended that absence of incentives has been suggested to be a main obstacle to knowledge sharing across cultures. They argued further that incentives, including recognition and rewards, have been suggested as interventions to ease knowledge sharing and help build a supportive culture. Moreover, they argued that such incentives act as interventions to facilitate knowledge sharing and assist in building a supportive culture. Moreover, Ramirez (2007:7) identified the need for incentives to motivate employees to share their knowledge as opposed to hoarding it. To encourage knowledge contributions properly, organizations must re-align incentive schemes to precisely account for these vital contributions. For Islam, Ahmed, Hasan and Ahmed (2011:5903) an effective reward system is essential in order to motivate employees to share knowledge between themselves and between different departments, because, in the absence of proper motivation, some employees may be unwilling to share knowledge

due to fear of loss as a result of this action. Rewards could range from monetary incentives to non-monetary rewards (Jahani, Ramayah, and Effendi 2011:89).

Oliver and Kandadi (2006:20) confirmed that organizational rewards motivate employees towards knowledge sharing and foster a knowledge culture. They opined that indirect rewards such as appreciation and recognition play a greater role than the monetary incentives in knowledge sharing. According to Wasko and Faraj (as quoted in Dube and Ngulube 2012:74), the motivation to share knowledge is affected by whether the decision to share is viewed primarily as economic and motivated by self-interest, or non-economic and motivated by community interest and moral obligation.

On the other hand, Walter, Ribiere and Galipeau (2013:4) claimed that using rewards and incentives would have a negative effect, because of a motivational crowding-out effect. This suggested that monetary rewards would undermine intrinsic motivation, especially when the intrinsic motivation was already strong. Problems with rewards arise, where it is not clear who should get the reward, since new developments most often ground on previous work (Walter, Ribiere and Galipeau, 2013:4). Furthermore, offering rewards assumes that employees would not actively do what the organization would like them to do. Rewards are used to lead employees to perform expected activities. It can become a practice to control people, leading to lower self-determination. Rewards also tend to produce rather short-term changes and the behavior change is likely to vanish once rewarding is discontinued. This might be because rewards do not stimulate knowledge sharing, but instead try to change the attitude towards it (Jiacheng, Lu and Francesco 2010).

2.6.5 Organizational structure

Wang and Noe (2010:119) and Tagliaventi and Mattarelli 2006:296) opined that a functionally segmented organization is likely to impede knowledge sharing across functions and CoPs. They stated that knowledge sharing may be facilitated by having less centralized organizational structure. Ramirez (2007:9) concurred with Wang and Noe in their assertions and said that organizational demographics, especially large size and formal status differentials, have a negative influence on knowledge sharing. Researchers have shown that knowledge sharing may be facilitated by having a less centralized organizational structure, creating a work environment that encourages interaction among employees such as through the use of open workspace, use of fluid job descriptions and job rotation and encouraging communication across departments and informal meetings (Kim and Lee 2006:375). Overall, the results of these studies suggest that organizations should create opportunities for employee interaction to occur and employees' rank position in the organizational hierarchy and seniority should be de-emphasized to facilitate knowledge sharing. Meanwhile, Maponya (2004:11) argued that there is a need to redesign the structure of academic libraries so that they will be able to advance the services they offer to both today's and tomorrow's users.

2.7 Obstacles to knowledge sharing

Ramirez (2007:4) argued that, as with most problems, it is difficult to determine the solution if one is not aware of the underlying issue or barriers that one may encounter in trying to solve a problem. As such, an understanding of the obstacles to knowledge sharing in organizations is vital in order to explore strategies to encourage knowledge sharing.

Riege (2005:24) said that information or knowledge is power, inequalities in status and perceived lack of job security can also be potential barriers. In the old school of thinking where profitability was reflected by an organization's output, knowledge hoarding rather than sharing was believed to benefit career advancement. Sharing of knowledge often was regarded as weakening an employee's corporate position, power or status within the company. Similarly, Ramirez (2007:4) added that the view of knowledge is that power hinders the sharing of knowledge in organizations. Meanwhile, Ngulube (2005:54) postulated that lack of trust among employees might be detrimental to knowledge sharing in an organization.

Personal ethics also plays a role in knowledge sharing. Keyes (2005:15) suggested that since knowledge is controlled by individuals, knowledge sharing can be assumed to be an ethical behavior. Wang (2004:375) analyzed the relationship between ethics and knowledge-sharing intentions and found a significant positive relationship. Workers who felt threatened by competition from colleagues might reduce their knowledge sharing, essentially hoarding knowledge (Wang 2004:376).

Job security concerns as obstacle to knowledge sharing are further exacerbated when an organization is experiencing lay-offs. Employees are unwilling to share knowledge because the fear lay-offs. They are unwilling to share mistakes and failures, despite the fact that this knowledge could prevent other employees from making the same errors, and therefore save the company money and time. They may not want to share positive knowledge, as they believe their job security is inextricably linked to their personal knowledge and expertise (Davenport, De long and Beers 1998:53).

According to Riege (2005:24), there are 17 potential individual factors that hinder people from sharing knowledge and they include:

- General lack of time to share knowledge, and time to identify colleagues in need of specific knowledge;

- Apprehension of fear that sharing may reduce or jeopardize people's job security;

- Low awareness and realization of the value and benefit of possessed knowledge to others;

- Dominance in sharing explicit over tacit knowledge such as expertise and experience that require hands-on learning, observation, dialogue and interactive problem solving;

- Use of strong hierarchy, position-based status and formal power (''pull rank'');

- Insufficient capture, evaluation, feedback, communication, and tolerance of past mistakes that would enhance individual and organizational learning effects;

- Differences in experience levels;

- Lack of contact time and interaction between knowledge sources and recipients;

- Poor verbal/written communication and interpersonal skills;

- Age differences;

- Gender differences;

- Lack of social network;

- Differences in education levels;

- Taking ownership of intellectual property due to fear of not receiving just recognition and accreditation from managers and colleagues;

- Lack of trust in people because they may misuse knowledge or take unjust credit for it;

- Lack of trust in the accuracy and credibility of knowledge due to the source; and

- Differences in national culture or ethnic background; and values and beliefs associated with it (language is part of this).

2.8 Summary

The literature reviewed revealed that all organizations, whether small, medium-sized, profit making or non-profit making value the knowledge they possess, whether tacit or explicit. Studies also revealed that given the importance or value that comes with knowledge, it is vital to ensure it always remains in an organization even long after employees left the organization. In order for this knowledge to reach its full potential as an organizational asset, it needs to be shared. Knowledge-sharing practices, however, require some critical success factors that will motivate members of an organization to strive for knowledge and also an environment that is conducive to its operation.

Researchers have discovered that effective knowledge sharing requires the use of both technological and non-technological mechanisms. This is despite the fact that knowledge is not a technological or a computer-related subject. Technology has, however, been found to be an enabler of knowledge sharing. The literature has also revealed that in libraries, particularly, a great deal of knowledge sharing is entirely uncoordinated and any sharing of information and knowledge has been on an informal basis and usually based on conversations. In order to continually render improved service delivery, the studies have suggested that organizations should effectively disseminate their knowledge.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Chapter Two reviewed the literature related to this study. In particular, the literature review focused on the following themes: the concept of knowledge, how it differs and develops from data and information, different types of knowledge, the understanding of knowledge sharing, knowledge-sharing practices and the critical success factors associated with those practices, various knowledge-sharing tools and different inhibitors of knowledge sharing. As was revealed in the previous chapter, the review of literature was vital in finding out what has been researched on the subject understudy and how those studies inform the current ones. This chapter discusses different research methods and approaches as they apply to this study.

This research methodology chapter discusses the research approach and design, it identifies the target population and the sampling technique used and describes the ethical considerations pertaining to this study. The instruments that were used in collecting data were also discussed.

As Kothari (2004:8) purported, research methodology is a way to systematically solve the research problem. Thus, when we talk about research methodology we not only talk about the research methods, but also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or technique and why we are not using others so that research results are capable of being evaluated either by the researcher himself or by others (Kothari 2004:8). Similarly, Leedy and Ormrod (2005:2) defined research methodology as systematic process of collecting, analyzing and interpreting information in order to increase our understanding of the

phenomenon we are interested in or investigating. Kumar (2005:7) defined research as a structured inquiry that utilizes acceptable scientific methodology to solve problems and creates new knowledge that is generally applicable.

3.2 Research approach

As stated by Neuman (2000) and Buabbas (2009), research approaches can be distinguished in many ways and one such feature used to distinguish research is by classifying it as either quantitative or qualitative. In addition to quantitative and qualitative research, the mixed methods research (MMR) method as it is commonly known, is also being favored by several researchers, who prefer to adopt a holistic approach in finding solutions to research problems. In addition, Johnson, Onwuegbuzie and Turner (2007:112) said MMR is becoming increasingly articulated, attached to research practice and recognized as the third major research approach or paradigm, along with qualitative and quantitative research. Ngulube, Mokwatlo and Ndwandwe (2009:108), among other researchers, showed evidence of the use of MMR in Library and Information Science research.

For the purpose of this study, both quantitative and qualitative research approaches have been integrated in one study to obtain views from the respondents (librarians) through the usage of interviews and questionnaires. The combination of quantitative and qualitative approaches was deemed appropriate for this study in order to make use of multiple methods for data collection, interpretation and understanding of research results in a natural setting. Because quantitative and qualitative researches use various data sources, combining them in a study may validate the results. Meetoo and Temple (2003:3) supported this claim when they argued that one way in which researchers have

tried to establish their research as valid is by combining various methods to compare the results. Wamundila (2008) also combined the two research approaches in a single study when developing guidelines for a knowledge management policy to enhance knowledge retention at the University of Zambia.

Bonoma (as cited in Esteves and Pastor 2004:73) added that collecting different kinds of data by different methods from different sources provides a wider range of coverage that may result in a fuller picture of the unit under study than would have been achieved otherwise. The use of both quantitative and qualitative methods in one study is common in knowledge management research as it enables the researcher to identify processes, systems as well as facilitating the determination of effective practices (Squier and Snyman 2004:29). For Creswell and Clark (2011:12), the integration of two research approaches in one study provides strengths that offset the weaknesses of both quantitative and qualitative research.

3.2 Research design

Leedy and Ormrod (2005:70) explained a research design as a plan or strategy that moves from the underlying philosophical assumptions to specifying the selection of respondents, the data gathering techniques to be used and the data analysis to be done. The choice of a research design is based on the researcher's assumptions, research skills and research practices and it influences the way in which he or she collects data. (Leedy and Ormrod 2005:70). There are currently a very wide range of designs from which a researcher may select one that complements his philosophical assumptions and most appropriate for collecting the kind of data that is relevant to answering the research questions identified (Tayie 2005:50).

However, this research employed the case study design. According to Bhattacherjee (2012:93), a case study research is a method of intensively studying a phenomenon over time within a natural setting in one or a few sites. Miles and Huberman (as cited in Punch 2009:119) defined a case as a phenomenon of some sort of experience occurring in a bounded context. Punch (2009: 119) purports that in a case study research, the basic idea is that a single case or a small number of cases will be studied in detail, using whatever methods and data seem relevant. The case study may be an individual, a role or a small group, or an organization, a community or a nation (Punch 2009:119). It could also be a decision, a policy or a process, or an incident or event of some sort, and with reference to this study, the case is the process of knowledge sharing at TML. Kumar (2005:113) noted that a case study provides an opportunity for the intensive analysis of many specific details often overlooked by other methods.

3.3 Data collection tools

Kumar (2005:118) says there are two major approaches to gathering information about a situation, a person, a problem or any given phenomenon. Sometimes, information required is already available and needs only to be extracted. However, there are times when the information must be collected. According to Babbie (2001:76), the studies in which the researchers collect new data through interviews, questionnaires, observations or whatever methods are referred to as primary data designs. On the other hand, studies in which researchers use the existing data such as census data or document and texts that were produced previously are called secondary data studies (Babbie, 2001:76). However, for this study the primary design was used.

In this study, the researcher used the self-administered questionnaires and an interview guide as research instruments for collecting data administered sequentially. Sequential strategy according to Kroll and Neri (2009:40) usually involve multiple phases of data collection during which either a qualitative or quantitative data collection method dominates. The research purpose and the particular set of research questions determine the particular sequence in the data collection. For this study, data was collected firstly through a questionnaire followed by an interview.

As the population in this study, both the questionnaire and the interview were answered by the librarians in order to solicit their views on knowledge sharing. According to Olsen (2004:3), this mixing of data types is called triangulation. In a broad way, triangulation is defined as the use of multiple methods, mainly qualitative and quantitative, in studying the same phenomena (Hussein 2009:3).

In social science, the use of triangulation can be traced back to Campbell and Fiske (1959). This was later developed by Web (1966) and elaborated by Denzin (1970). They argued that more than one method should be used in the validation process to ensure that the variance reflected that of the trait and not of the method (Jick 1979:602). Denzin (as cited in Bryman 2004:2) extended the idea of triangulation beyond its conventional association with research methods and designs and distinguished four forms of triangulation: data triangulation, which entails collecting data through several sampling strategies, so that slices of data at various times and social situations, as well as on a variety of people, are gathered; investigator triangulation, which means the use of more than one researcher in the field to collect and interpret data; theoretical triangulation

which refers to the use of more than one theoretical position in interpreting data; and methodological triangulation which refers to the use of more than one method of data collection. This study however, employed the methodological triangulation. Yeasmin and Rahman (2012:155) argued that since much social research is founded on the use of a single research method and as such may suffer from limitations associated with that method or from the specific application of it, multiple methods offer the prospect of enhance confidence.

3.3.1 Questionnaires

Invented by Sir Francis Galton on 16 February 1822, in a questionnaire according to Bhattacherjee (2012:74), is a research instrument consisting of a set of questions (items) intended to capture responses from respondents in a standardized manner. For Kumar (2005:126), a questionnaire is a written list of questions, the answers to which are recorded by respondents. In a questionnaire, respondents read the questions, interpret what is expected and then write down the answers (Kumar 2005:126). Questions in a questionnaire may be unstructured or structured. Unstructured questions ask respondents to provide a response in their own words, while structured questions ask respondents to select an answer from a given set of choices (Bhattacherjee 2012:74).

The content of the questionnaire was based in total on the objectives of the study. The questionnaire consisted of multiple-choice questions as well as the likert scale questions, and the questionnaire mostly yielded quantitative data.

3.3.1.1 Structure of a questionnaire

Mavodza (2010:112) stated that the order of the questions in the questionnaire could have an impact on the accuracy of responses. Kumar (2005:126) argued that in a case of a

questionnaire, as there is no one to elaborate on the questions asked to participants, it is important that questions asked are clear and easy to understand. Also, the layout of a questionnaire should be such that it is easy to read and observe and the sequence of the questions should be easy to follow (Kumar 2005:126).

In selecting or designing questionnaire items, the researcher must consider the question format that will best obtain the information desired. The form of the question in turn determines the method of response (Connaway and Powell 2010:150).

When designing a questionnaire for this study, questions were asked bearing in mind the objectives of the study. The questionnaire had two parts. The first part of the questionnaire provided the introduction of the researcher, the research topic as well as the study objectives. The second part consisted of the research questions, which had six sections: demographic details; knowledge sharing; knowledge-sharing tools (technology based); knowledge-sharing tools (human based); knowledge-sharing practices and knowledge-sharing obstacles. This questionnaire was designed for all 30 staff members of TML consisting professionals, paraprofessionals and non-professionals.

3.3.2 Interviews

Bhattacherjee (2012:78) opined that interviews are a more personalized data collection tool than questionnaires, and are conducted by trained interviewers using the same research protocol as questionnaire surveys (i.e. a standardized set of questions).

According to Balyan (2012:1) in this data collection method, the interviewer personally meets the participants and asks them the necessary questions to them regarding the subject of enquiry. Usually, a set of questions or a questionnaire is carried by the interviewer and questions are also asked according to that. In all their variety, interviews

are a valuable qualitative method for researchers who make effective choices along the continuum between structured and unstructured interviews (Connaway and Powell 2010:117).

The interview was conducted with only five staff members chosen through the purposive sampling technique in order to corroborate data collected through questionnaires. For Cresswell (2003:185), purposive sampling refers to the selection of sites or participants that will best help the researcher understand the problem and the research question, they must also be willing to reflect on and share their knowledge on the issue. The professionals working at TML were found to be the most suitable source of rich valuable knowledge of knowledge-sharing experiences at TML. The interview guide consisted of two parts, namely the salutation, the introduction of the research topic and the objectives. The second part consisted of five questions aligned to the objectives.

3.4 Data collection procedures

This section describes the steps that were followed in collecting data for this study. Data was collected in the second week of July 2015. Care was taken to perform this excise during this period because it was during the school recess when the library staff is not busy. The assumption was that the response rate would therefore be increased.

The researcher hand delivered a total of 28 questionnaires to a designated staff member who then delivered them to the targeted population, which was the entire TML staff complement. The questionnaire was accompanied by the covering letter detailing the purpose and study objective, and the participant information sheet, together with the consent to participate in the study, was attached to the questionnaire. The questionnaire was also accompanied by the letter approving the request to conduct the study.

3.5 Validity and reliability

According to Ritchie and Lewis (2003:270), validity is concerned with the meaningfulness of research components. When researchers measure behaviors, they are concerned with whether they are measuring that which they are purported to measure. Golofshani (2003:599) added that validity determines whether the study truly measures that which it was intended to measure or how truthful the study results are. In other words, does the data collection tool allow you to hit "the bull's eye" of your research object? Therefore, the questions asked in the research instrument should address the objectives of the same study. One way that the researcher of this study established if the study is valid is by combining different methods.

Reliability, on the other hand, may be defined as the consistency or constancy of a measuring instrument or the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure (Long and Johnson, 2000:30). As for Bernard (2011:42), reliability is related to the possibility of coming to the same answer if a particular instrument is used to measure a specific theory more than once. In other words, in order to call data or findings reliable, the researcher must get to the same results each time it is measured. In order to ensure the maximum validity and reliability of this study, the researcher used both quantitative and qualitative approaches that allowed him to use multiple data sources – triangulation as is normally called.

This was achieved through the use of an interview guide where the pattern of questioning for each interviewee was followed. The distributed questionnaire also had the same questions for the participant and as far as data collection was concerned, there was some form of consistency. Furthermore, in order to ensure accuracy and trustworthiness of

collected data, the researcher recorded all the interviews with the assistance of a voice recorder and transliterated. Therefore, if another researcher were to undertake this study under the same conditions, they would arrive at the same findings as the ones under this study.

3.5.1 Pretesting of research instruments

According to Anderson and Arsenault (1998:178), pretesting of data collection tools has been described as one of the major activities that need to be undertaken before the actual data collection takes place. Johnson and Christensen (2004:177) stated that the number of participants that can be used for pretesting can range from two to ten, and that the pretested participants should reflect the actual population of respondents that would be involved in the actual study. Babonea and Voicu (2011:1323) added that pretesting is the only way to evaluate in advance whether a questionnaire poses problems for interviewers or respondents and, as a result, elementary textbooks and experienced specialists declare pretesting indispensable. Pretesting of data collection instruments, i.e. the interview guide and a questionnaire, was done with three participants.

3.6 Population

According to (Connaway and Powell 2010:116), the population is the aggregation of units to which one wishes to generalize the results of a research study. Selection of the population must precede the selection of the sample, assuming a sample is to be drawn, and is crucial to the success of the sampling stage. Selection of the population must be done carefully with regard to the selection criteria, desired size, and the parameters of the survey population (Connaway and Powell 2010:116). The primary aim of this study is to find out if the existing knowledge is being effectively disseminated and shared among the

librarians of TML. All 30 the staff members of TML formed the population of this study. Therefore, this means that no sampling was conducted. The population included both professional, paraprofessional and non-professional staff in order to get the bigger picture regarding knowledge sharing at TML.

Position	Number of positions
University Librarian	1
Senior Librarian	1
Librarians	6
Assistant Librarians	2
Trainee Librarian	2
Access Assistant	3
Library Officer	1
Library Officer Access	1
Assistant Library Officer	1
Documentalist	1
Senior Documentlist	1
Assistant Documentalist	1
Archives Officer	1
Archivist	2
Senior Desk Assistant	2
Senior Binding Assistant	1
Assistant Binder	1
Senior Stack Assistant	1
Desk Assistant	1

Table 02: Population for data collection

3.7 Ethical considerations

When conducting this study, the researcher adhered to the ethical and moral obligations with regard to the data collection, analysis, as well as in report writing. The researcher avoided acting in an ethically irresponsible manner because the study involved people. Bhattacherjee (2012:1370) explained research ethics as the moral distinction between right and wrong, and what is unethical may not necessarily be illegal. Ethics, if applied, may stop or restrict researchers from using experimental treatments that could harm research participants from posing questions that would prove extremely embarrassing or threatening, from making the observations that would deceive or put research subjects under duress, and from reporting information that would constitute an invasion of people's privacy. In line with this, the researcher had to ensure the protection and preservation of the organization as well as the people's individual privacy.

According to Unisa policy on research (2007:15), privacy includes autonomy over personal information, anonymity and confidentiality, especially if research deals with stigmatizing, sensitive or potentially damaging issues of information when deciding on what information should be regarded as private and confidential, the perspective of respondents on the matter should be respected (UNISA policy on research 2007:15).

Unisa has a policy on research ethics (2007) which outlines ethical research guidelines to be followed when conducting research. The researcher followed and complied with these guidelines. Furthermore, ethical considerations cover such aspects as voluntary participation, protection from all forms of harm, confidentiality, anonymity, informed consent, privacy and the conduct of the researcher when executing the research exercise (Babbie 2010:64-67).

In order to obtain informed consent from the potential respondents, the researcher attached a letter on the main questionnaire explaining the objectives of the study well before the completion of the questionnaire. Peterson (2012:155) stated that it is the duty and responsibility of the researcher to furnish the potential participant with the necessary information on the nature and purpose of the research to be undertaken. The researcher provided a covering letter with all the required details to this end.

3.8 Evaluation of the research methodology

It is generally understood that each research methodology has its own unique challenges and this means that the methodology applied to this study was no exception. Among the challenges encountered in undertaking this study was the response rate, which was a concern on two accounts. Firstly, the researcher had anticipated that the response rate to the questionnaires distributed would be much better than it turned out to be. For instance, out of the 25 questionnaires distributed, only 15 were completed and returned. Secondly, the response rate was a concern where a significant number of respondents either partially or wholly did not answer certain questions. An example of this is question 24 **(see appendix D)** where respondents were asked to indicate which rewards or incentives, if any, are there to encourage knowledge sharing at TML.

A number of reasons could be attributed to this unexpected response rate to questionnaires. For instance, the questionnaires were distributed during the official university recess and the anticipation was that there was not much work being done during this time; therefore, librarians would have adequate time to complete and return the questionnaires. However, it has since emerged that this is also the time that most librarians take their leave days because there are no students on campus. Another

reason for the high non-response rate was that after the questionnaires had been distributed, the country faced political instability and there was a two-day stay away when it was assumed that some staff members decided to stay home.

Despite the above challenges, the researcher believes the combination of the two data collection methods was a good approach to the study. For example, the interview mostly focused on those questions that the researcher thought were either not answered clearly or not answered at all. Going forward, it may be helpful for anyone wishing to undertake a similar study to be mindful of the said challenges.

3.9 Summary

This chapter has described the research methodology that was used in this study. The research design, the integration of the two research approaches and the data collection techniques complemented each other in explaining how knowledge sharing could be used in improving service delivery at TML. The ethical considerations as they pertain to this study were also outlined. The next chapter presents the research findings from this study

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRTATION

4.1 Introduction

Chapter Three described the research methodology that was followed in this study. The objective of this chapter is to present, analyze and interpret the results obtained during the process of data collection. The questionnaire consists of seven sections (**See Appendix D**) and the interview schedule consists of five questions **(see Appendix E)**. All data collected was guided by the following objectives:

- To determine the understanding of knowledge sharing at TML

- To identify knowledge-sharing practices at TML

- To identify tools for sharing knowledge

- To identify the critical success factors of knowledge sharing

- To identify knowledge-sharing obstacles

4.1.1 Presentation of findings

This section presents the findings collected by means of a questionnaire and through interviews.

4.1.1.2 Participant questionnaire

The main aim of this study as noted in Chapter One is to find out if knowledge sharing can be used as a tool to improve service delivery at the National University of Lesotho's Thomas Mofolo Library. To this effect, questionnaires were self-administered to the designated Head of Client Access and Extension Services (HCAES) who then delivered them to the participants. Out of the 25 questionnaires administered, 15 were returned, providing a response rate of 60%. This response rate was pleasing given the time of data collection. Data was collected during the period when the university was on official

recess. The assumption was that during this time the librarians would not be busy as there would be less or no students on campus. To guard against low response or non-response, the researcher had to rely on several visits to the library as reminders to the librarians and reminded them to complete the questionnaire. As already noted, the response rate was pleasing and this supported by Richardson, Babbie and Kidder (as cited in Nulty 2008:306) when stating that 50% is regarded as an acceptable response rate in social research surveys. Neuman (2000:267) added that a response rate is considered poor if it is below 50%, while that which is over and above 90% is considered excellent. Therefore, it is justified given the arguments above to draw conclusions from the participants' questionnaires returned.

4.1.1.3 Interview

Anderson and Arsenault (1998:190) noted that one way in which researchers used to collect data is through interviews. Interviews were conducted with five staff members in July 2015, after collecting the questionnaires for purposes of consistency.

4.2. Questionnaire and interview findings

This section presents the findings of the questionnaire administered to all the staff members at TML and the interviews held with TML section heads. The questionnaire addressed all the study objectives and included all sections, namely the demographic details of respondents, knowledge sharing, technologically based knowledge-sharing tools and human-based knowledge-sharing tools.

4.2.1 Demographic details of respondents

The researcher wanted to find the characteristics of respondents, including their positions, gender and their experience in years, their educational qualifications and their age group.

Table 4.1: Positions of respondents

Positions	Number of respondents	Percentage
Archives Officer	1	6.70%
Assistant Documentation	1	6.70%
Assistant Librarian	2	13.30%
Cataloguer	1	6.70%
Librarians	4	26.70%
University Librarian	1	6.70%
Library Assistant	2	13.30%
Library Officer	1	670%
Senior Library Officer	1	6.70%
Stack Assistant	1	6.70%
Total	**15**	**100.00%**

In terms of positions, the majority of respondents (4 (26.7%)) were librarians. This was followed by the assistant librarians (2 (13.3%)) and library assistants (2 (13.3%)). Other positions were archives officer (1 (6.7%)), assistant documentation (1 (6.7%)), cataloguer (1 (6.7%)), library officer (1 (6.7%)), senior library officer (1 (6.7%)) and stack assistant (1 (6.7%)).

Table 4.2: Gender of respondents

Gender	Number of respondents	Percentage
Male	4	26.70%
Female	10	66.70%
Not answered	1	6.70%
Total	15	100.00%

Regarding gender of respondents, most respondents (10 (66.7%)) were women, and males constituted (4 (26.7%)). One (6.7%) respondent decided not to answer a question on gender.

Table 4.3: Experience of respondents

Years of experience	Number of respondents	Percentage
2	1	6.70%
10	1	6.70%
12	1	6.70%
15	2	13.30%
20	1	6.70%
26	1	6.70%
27	1	6.70%
29	1	6.70%
32	1	6.70%
35	1	6.70%
Not answered	4	26.70%
Total	**15**	**100.00%**

In terms of experience of respondents in years, the majority (2 (13.3%)) had 15 years' of experience. The experience of other respondents were 1 (6.7%) with 10 years, 1 (6.7%) with12 years, 1 (6.7%) with 20 years, 1 (6.7%) with 26 years, 1 (6.7%) with 27 years, 1 (6.7%) with 29 years, 1 (6.7%) with 32 years and 1 (6.7%) with 35 years. However, 4 (26.7%) of the respondents decided to be silent regarding their experience.

Table 4.4: Qualifications of respondents

Qualifications	Number of respondents	Percentage
Diploma in LIS	5	33.30%
Degree in LIS	3	20.00%
Master in LIS	5	33.30%
PhD in LIS	1	6.70%
Not answered	1	6.70%
Total	15	100.00%

Respondents were also requested to indicate their level of educational qualifications. The majority of those that answered this question were holders of Diplomas or Master's Degrees with 5 (33.3%) each. These were followed by the degree holders 3 (20%). Furthermore, 1 (6.7%) had a PhD and all these qualifications were in Library and

Information Science (LIS). However, 1 (6.7%) did not answer the question on their educational qualifications.

Table 4.5: Age range of respondents

Age Range	Number of respondents	Percentage
Between 25 and 34	1	6.70%
Between 35 and 45	5	33.30%
Between 46 and 56	4	26.70%
Between 57 and 65	5	33.30%
Total	**15**	**100.00%**

With regard to the age range of respondents, the majority (5 (33.3%)) were between the ages of 35 and 45, as well as between 57 and 65 years of age. These were followed by those between the ages of 46 and 56 years who constituted 4 (26.7%) and those between 25 and 34 years, constituting 1 (6.7%).

4.2.2 Knowledge sharing

This section sought to determine the understanding of knowledge sharing at TML.

4.2.2.1 Knowledge-sharing opinion

To find out if TML staff knew anything about knowledge sharing, respondents were asked about their general opinion on knowledge sharing. According to the statistics, 9 (60%) respondents thought knowledge sharing is important to service delivery. This is in line with what Maponya (2004:2) noted when he asserted that knowledge sharing is one of the viable means in which academic libraries could improve their services in the knowledge economy. In addition, Okonedo and Popoola (2012:6) noted that knowledge sharing enables employees (including librarians) to share their insight and experiences in order to allow for fast, efficient and effective provision of information services to their users. The second largest number of respondents (6 (40%)), on the one hand, were of

the opinion that knowledge sharing provides advantage to organizations. This also corresponds with what Kamal, Manjit and Gurvinder (2007:23) stated that knowledge is considered to be the main driver of the economy in a knowledge economy landscape. This is largely due to the undisputed fact that it is a valuable and strategic asset that enables organizations to achieve a competitive advantage and resilience (Butler, Feller, Poppe and Barry as cited in Dube and Ngulube 2012:68). In addition, Christensen (2007:44) asserted that if knowledge sharing is to positively impact on the organizational performance, then companies would have to engage in continuous knowledge sharing, since the process consists of transferring from the more knowledgeable to the less knowledgeable. Figure 4.1 summaries respondents' opinions on knowledge sharing.
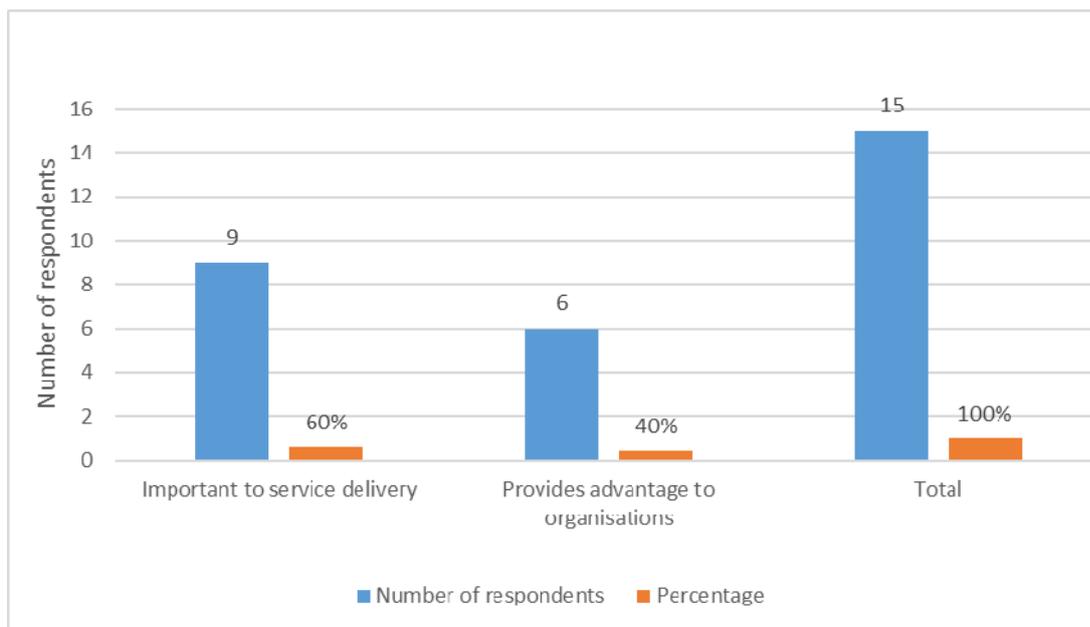
Figure 4.1: Respondents' opinions on knowledge sharing

4.2.2.2 Knowledge sharing on helping TML staff to solve problems

On further soliciting respondents' views on knowledge sharing, respondents were asked if they thought knowledge sharing may help other TML staff to solve problems and were asked to indicate their answers as either yes or no. A total of 14 (93.3%) respondents were of the opinion that knowledge sharing may help other TML staff to solve problems, compared to 1 (6.7%) who did not answer this question. The fact that the majority of respondents are of the view that knowledge sharing may help them solve problems at the Library is in line with what (Christensen 2007:44) alluded to when he stated that if knowledge is not shared, then there is a risk of duplicating work. In a library environment, this happens when, for example, service providers on the evening shift, make the same mistakes that service providers on the day shift have already made. The summary of these findings is illustrated in figure 4.2.

Figure 4.2: Knowledge sharing helping TML to solve their problems

The respondents who answered in the positive to the question above on how knowledge sharing may assist other TML staff in solving problems were requested to further explain how knowledge sharing may assist TML staff in solving their problems.
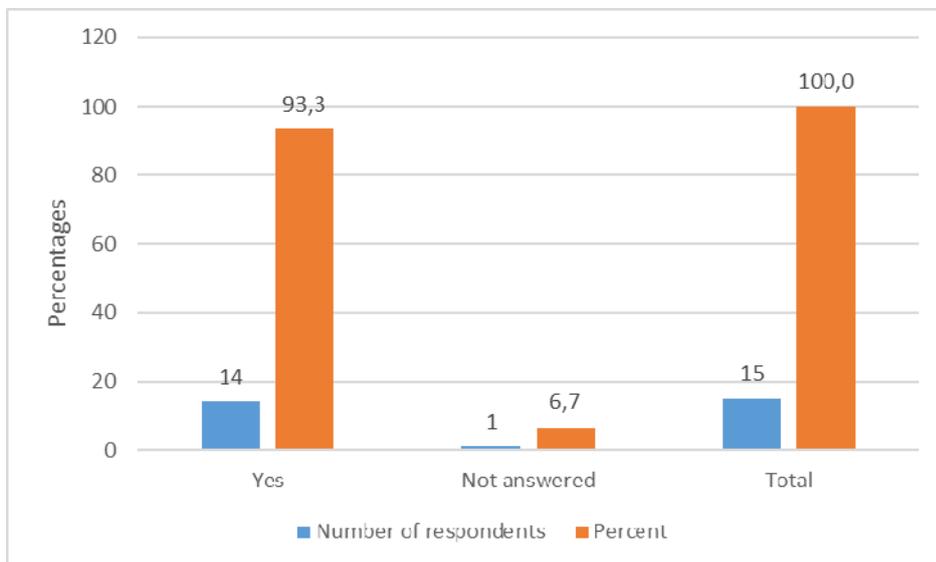
Table 4.6: Summary of the follow-up explanations of how knowledge sharing may help TML staff in solving problems

Explanations	Number of respondents	Percent
One enhances or supplements or builds up one's own knowledge with that of others – provides synergy on what is lacking or on what is already existing – allows diffusion at various levels	1	6,7%
Because staff will be able to work efficiently and learn from others	1	6,7%
By copying from others who have experience	1	6,7%
By sharing activities of knowledge through which skills expertise and could be exchanged among organisations and co-workers	1	6,7%
If there is something that has to be known and all TML staff know it, it means serving TML and users will work smoothly	1	6,7%
It will empower them with the knowledge or awareness to do things well or correctly	1	6,7%
Knowledge sharing is all about learning from each other, helping each other and collaborating	1	6,7%
People will be able to share their opinions of how they see work performance	1	6,7%
Staff training	1	6,7%
The world is changing rapidly and needs people who are always provided with knowledge	1	6,7
They will be able to share ideas and will be able to advise each other on the problems in the library	1	6,7%
Through social networks	1	6,7%

4.2.2.3 Formalizing knowledge sharing

On this section, the researcher sought to understand if knowledge sharing is formalized in some way at TML or as suggested elsewhere in the literature, it only happens in an ad hoc manner. Figure 4.3 below summarizes the respondents' answers on a yes and no basis. The majority of respondents (8 (53.3%)) thought knowledge sharing is formalized, while 5 (33.3%) held the view that it is not structured and 2 (13.3%) decided not to answer the question. The views held by most respondents are contradictory to the reviewed literature. To this, Maponya (2004:16) argued that when it comes to libraries, it can be noted that a great deal of knowledge sharing is entirely uncoordinated and any sharing of information and knowledge is on an informal basis and usually based on conversation.

Similarly, Parirokh (2008:119) concurred with Maponya that academic libraries do not generally have specific knowledge management policies and strategies in place. Interestingly also, the interviewed staff members were also not in agreement with most of the questionnaire respondents on the formalisation of knowledge sharing at TML.

On the importance of making knowledge sharing formal at TML, all the respondents indicated that it is important to formalize knowledge sharing. They even suggested to the researcher that the introduction of a knowledge management position in the Library to deal with all the knowledge management issues could go a long way in addressing knowledge loss at TML. Of particular importance to the formalization of knowledge management is the following responses from one respondent.

> **Respondent 1:** *I think one of the reasons why knowledge sharing is not formalized at TML is maybe it was not emphasized even during our formal training period at different Universities. I think it is only lately that it is being emphasized.*

Respondent 2: I think knowledge sharing is not formalized because no one really know and understands it.

The summary of the study's findings regarding the formalisation of knowledge sharing at TML is presented in figure 4.3.
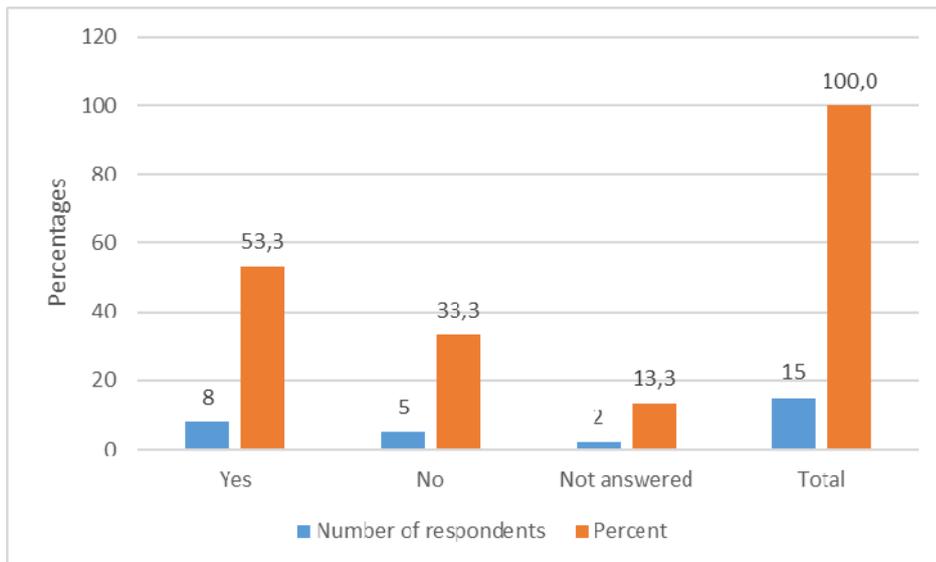
Figure 4.3: Formalization of knowledge sharing

4.2.2.4 Position of KM at TML

On the position of knowledge management at TML, respondents were asked to indicate if the Library had a KM policy, if KM is practiced in an ad hoc basis, if KM is practiced at all and if the Library had any system in place for retaining knowledge from experienced staff. The largest number of respondents indicated contradictory statements, with 3 (20%) stating that KM is not practiced at all. On the one hand, 3 (20%) of respondents indicated that the Library has a KM policy or strategy. On whether TML has a system in place for retaining knowledge from experienced staff, 2 (13.3%) answered yes and another 2 (13.3%) of the respondents said KM is practiced in and ad hoc manner. The worrying factor thought is that the largest number of respondents (constituting 5 (33.3%)) decided

not to say anything regarding their opinion on the position of KM at TML. Generally, the reviewed literature revealed that knowledge management is not practiced in libraries. For instance, Jantz (2001:35) asserted that the majority of academic libraries do not have a logical approach to capturing, organizing, storing and sharing all forms of organisational knowledge. Parirokh (2008:119) also noted that academic libraries do not generally have specific knowledge management policies and strategies in place. However, the reviewed literature also discovered instances where libraries had clear knowledge-sharing initiatives. For example, Jantz (2001:33) refers to a knowledge-sharing initiative at the New Brunswick branch of the Rugters University libraries in New Jersey, United States of America. The New Brunswick libraries consist of several smaller libraries in various locations. Their team of reference librarians decided to create a tool, known as the common knowledge database that enables the management and the use of the knowledge embedded in their employees' minds.

4.2.2.5 Sharing of perceptions and opinions

The researcher further sought to find out if there is a sharing of perception and opinions about work issues among TML colleagues at all. To this question, the largest number of respondents (6 (40%)) agreed with the statement. The second largest number of respondents (5 (33.3%)) strongly agreed with the statement while 2 (13.3%) disagreed. A small number of respondents (2 (13.3%)) indicated they were not sure. The fact that the majority of respondents agreed to the statement that librarians share perceptions and opinions about work issues is line with what Ramirez (2007:3) opined in the reviewed literature when he stated that knowledge sharing enables employees to share their insights and experiences in order to allow faster and more cost-effective project completions. Employees can draw upon the experiences of others in their pursuit of

finding solutions to problems. Redundancy of work is decreased as employees are not recreating knowledge (Arora 2002:245). The summary of perceptions and opinions is summarized in figure 4.4 below.
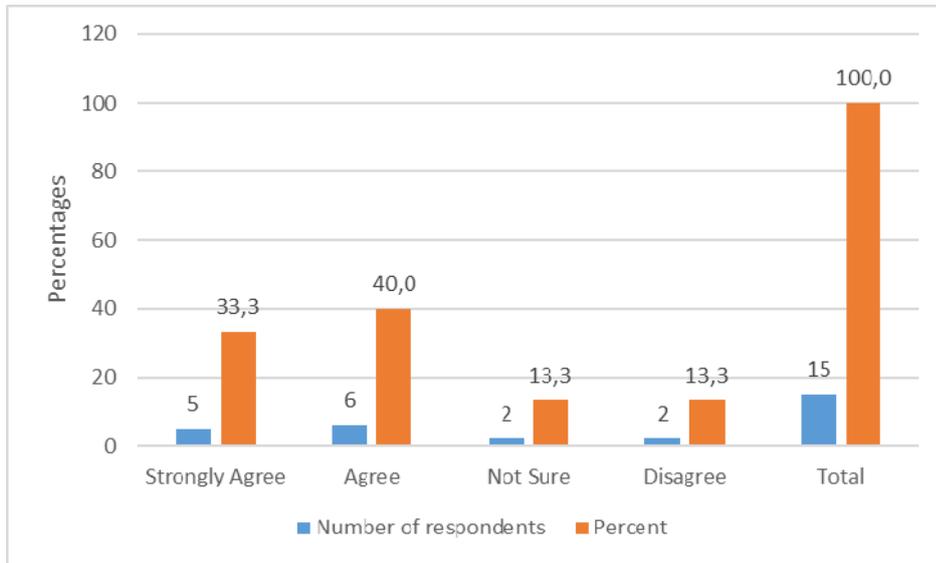
Figure 4.4 Sharing of perceptions

4.2.2.6 Availability of an intranet

Regarding the availability of an intranet at TML, the statistics below shows that the largest number of respondents (11 (73.3%)) said the Library has an intranet. A small number (3 (20%)) of respondents, on the one hand, said no and 1 (6.7%) decided to be silent on the question. The highest number of respondents who held the view that TML has an intranet, could be attributed to the need for usage of information and communication technologies for libraries. To this end, Mphidi (2007:3), in the literature review chapter, stated that to persuade people to share knowledge, they need to be motivated and provided with the necessary tools. If provided with the right tools and guidance, people will be able to make the knowledge-sharing process as efficient as possible. Intranets have appeared as one of today's most effective means of sharing information and knowledge in organizations.

Additionally, Avasia Ghosh (2002:641) stated that intranets are altering the way in which libraries create and circulate information and have numerous characteristics that are valuable to libraries. It saves time once they are employed into the Library setup. Intranets can lessen the replication of employee efforts of reference searches by displaying the results for all to see and, subsequently, make them always available (Avasia and Ghosh 2002:641). Moreover, Averweg (2008:2) stated in the reviewed literature that the intranet is a common feature in many organizations. With the increasing use of a technology infrastructure in organizations, there is a continued challenge for employees in an organization to contribute their knowledge willingly and to make use of knowledge sharing with other employees. The respondents who indicated the availability of an intranet were asked to state the type of content that is uploaded onto the intranet. Table 4.7 below presents the findings.

Content type	Number of respondents	Percentage
Academic and administrative	1	6.7%
Innovative millennium	1	6.7%
In-service training	1	6.7%
Messages to the library user on what is available	1	6.7%
New acquisition workshop announcement notices	1	6.7%
Not answered	10	66.7%
Total	15	100.0%

Table 4.7: Type of content uploaded on the intranet

4.2.2.7 Resignations at TML

The researcher wanted to find out if there were any resignations at TML in the preceding five years. To this question, 12 (80%) agreed that there were indeed resignations, while 2

(13.3%) answered that there were not. One (6.7%) respondent decided not to answer this question.
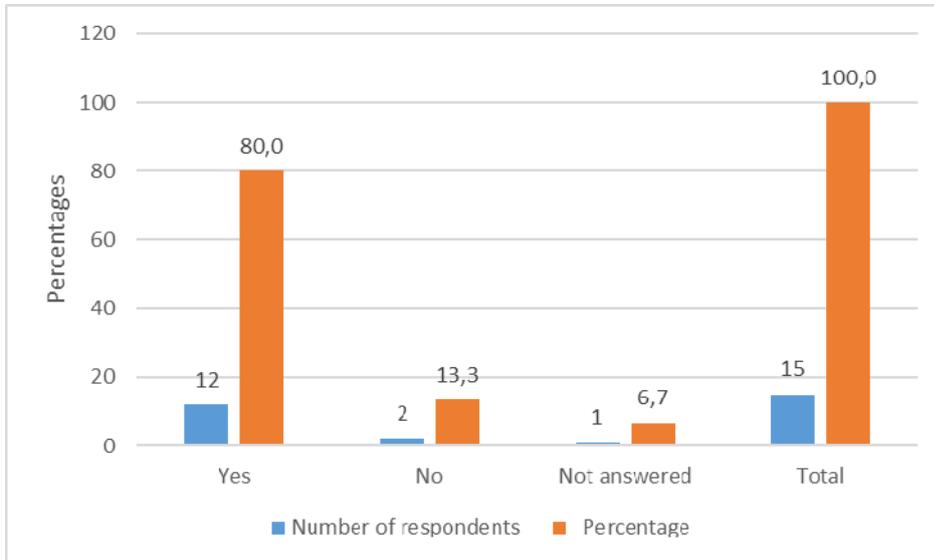
Figure 4.5: TML resignations

As a follow up to the previous question, those respondents who indicated that there were resignations in the preceding five years were asked if those who resigned were interviewed in order to retain their knowledge. The statistics revealed that 4 (26.7%) respondents agreed that resigning employees were interviewed while 5 (33.3%) answered no to the question. Six (40%) respondents did not answer this question.
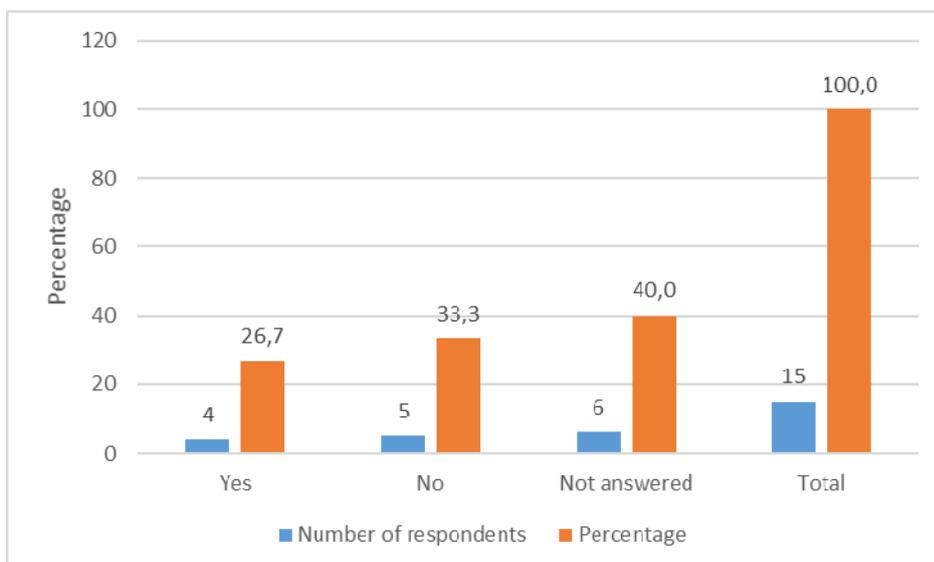
Figure 4.6: TML exit interviews

The views held by the majority of respondents who answered in the negative on whether the resigning employees were interviewed before leaving, were also echoed by the interviewed respondents. The researcher sought to find out how knowledge that is embedded in the minds of staff is captured when they either resign or retire.

In this respect, the interviewees held different views. However, the majority of them indicated that as far as retirements or resignations were concerned, nothing was being done to capture or retain knowledge. On the other hand, one interviewee indicated that although there is no policy to support the claim, there is an expectation of a formal handover of a retiring or resigning staff member to the remaining colleagues. However, it was not clear as to what is expected in the handover. Additionally, one interviewee mentioned that there are certain knowledge sharing techniques in place for knowledge retention such as staff rotation.

The fact that the majority of respondents, through questionnaires and interviews, felt that their colleagues who had resigned were not interviewed is very disturbing, as they might have left with that valuable knowledge that they acquired during their stay at TML. These views are also in line with the reviewed literature in Chapter Two, where Stam (as cited in Hana and Lucie 2011:85), opined that organizations (regardless of the economy sector, size of the organization, etc.) are facing a crisis of knowledge sharing, which is to ensure that staff will not leave the organization before transferring their experience. Bessick and Naicker (2013) argued that in situations where knowledge sharing is not a norm, employees could become the only owners of domain knowledge, meaning that this body of knowledge is literally lost when staff members leave an organization.

Furthermore, the reviewed literature through Asogwa (2012:3) revealed that library workers sometimes change employers or careers. They retire, and/or leave their workplace with the professional knowledge acquired in the course of working in the Library. When this occurs, the Library loses the experience and expertise of such employees. The wealth of knowledge that is held by older employees, which can be used to give the Library a competitive advantage, is lost (Asogwa 2012:3). Therefore, a knowledge management initiative in libraries becomes vital in order to harness the wealth, wisdom, expertise and experiences embedded in the minds of employees before they leave (Asogwa 2012:3).

Meanwhile, the researcher wanted to find out from the interviewees if TML has some type of system for documenting the problems solved. On this matter, the interviewees were adamant that, as far as they are concerned, problems were not document at all. The following are the responses from some respondents:

Respondent 1: As far as I am concerned, I have not seen that happening. May be in other sections, but across the Library it is not happening at all.

Respondent 2: We have a technical inquiries section that is mandated for documenting problems solved. However, in the past years there were constant reports of the missing "book" that is used for documenting the problems solved but they were encouraged to tie it so that it does not disappear. The expectation is that all queries should be recorded as well their solutions.

Respondent 3: As far as I am concerned, the only form of recording problems encountered is through meetings.

Respondent 4: There is no system for recording problems solved.

However, all the interviewees indicated the importance of documenting the problems solved in order to avoid duplication of work. As noted in Chapter One, in a library environment, this happens when, for example, service providers on the evening shift, make the same mistakes that service providers on the day shift have already made (Christensen 2007:44).

4.2.3 Knowledge-sharing tools (technology-based tools)

One of the study objectives of this study was to identify tools for knowledge sharing. In Chapter Two, knowledge sharing has been defined as an activity that facilitates knowledge flows in organizations. Such knowledge flows may include interactions of individuals or making references to codified knowledge (Bou-Liusar and Segarra-Cipres 2006:100). Knowledge-sharing tools include Human-based and technology-based tools. This section sought to discover the role of the technology-based knowledge-sharing tools as they apply to TML.

4.2.3.1 Computer literacy

As a start to this section, respondents were required to state if they considered themselves computer literate and to which degree according to figure 4.7 below. Fourteen (93.3%) respondents answered yes and 1 (6.7%) remained silent.
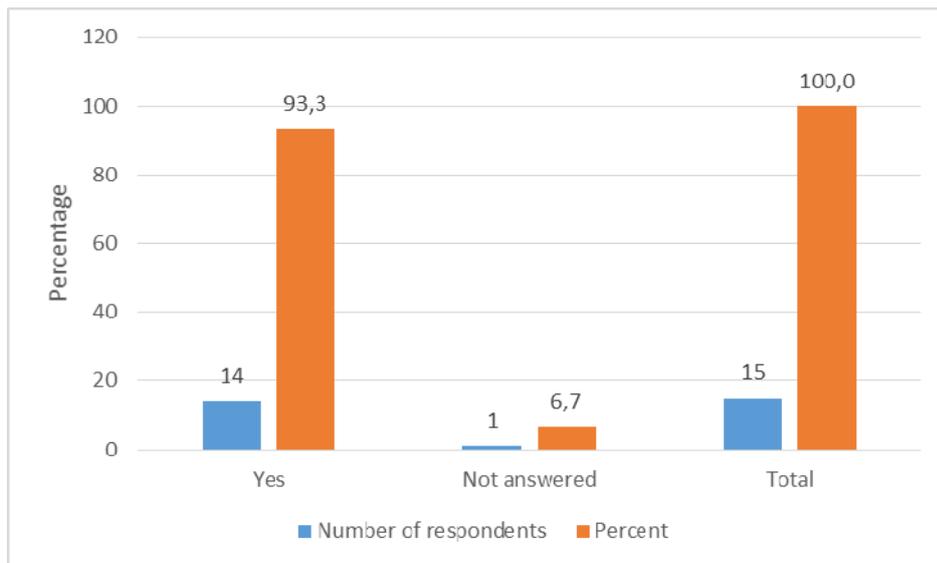
Figure 4.7: Computer literacy

The aim of this section was to determine if TML staff members had the necessary skills required to use the facilities that are available successfully. According to Asogwa (2012:4), the combination of computers, databases and telecommunications, particularly the internet, affords librarians an improbable number of options for ameliorating the ways in which librarians as organization operate. Furthermore, Ramirez (2007:10) noted that the use of computers makes possible the connections that enable knowledge sharing, but cautioned that it does not in itself persuade employees to share their knowledge. Technology in general should be observed as an enabler of knowledge sharing. While libraries can put the tools in place, there is no guarantee that staff is going to use them, or use them effectively, so there is still a human aspect to the knowledge-sharing tools. Given the statistics above, it is encouraging to note that employees are at least computer literate to use library technology.

4.2.3.2 Internet connection

Regarding internet connection, respondents were asked to indicate if TML had internet connection and all 15 (100%) agreed. The reviewed literature revealed the importance of internet connection in libraries. Avasia and Ghosh (2002:461), for instance, noted that the internet is playing an important role in changing the Library system as well as the way in which people see the library resources and library services. With the help of the web-based library services, users are attended round the clock. Internet provides links to different library sites specializing in every topic and they can be accessed from anywhere in the world (Avasia and Ghosh 2002:461). A follow-up question of whether internet connection is accessible to everyone in the Library was asked. The results indicated that the majority of respondents (14 (93.3%)) held the view that it was accessible to everyone, compared to only 1 (6.7%) who answered no to the question. The results of internet connectivity are presented in figure 4.8 below.
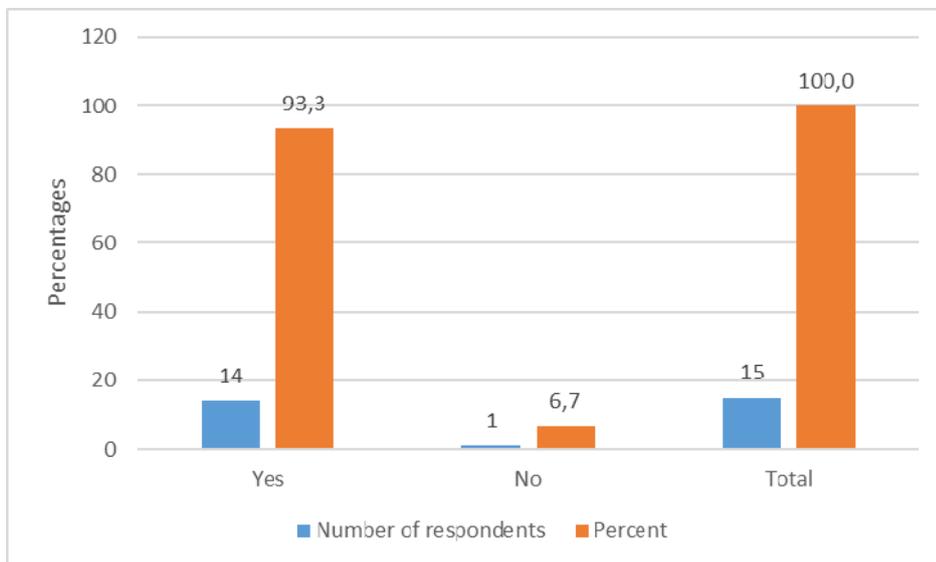
The net technology according to Ghosh and Avasia (2002:1) epitomizes a new environment for remaking some of the primary functions of libraries, including acquisitions and processing, cataloguing, public relation communication and online reference

services. The increased potential for knowledge sharing has changed the Library environment through a more open setting of knowledge sharing. Ramirez (2007:10) added that internet can overcome geographical boundaries, enabling employees to benefit from the experience and expertise of employees in other parts of the organization anywhere in the world. The fact that internet connectivity is accessible to everyone means that the sharing of knowledge is made easy at TML.

4.2.4 Technologies in use at TML

The researcher also wanted to know if TML staff were using various knowledge-sharing technologies and multiple responses were expected. From the statistics below, it became evident that the majority of respondents 15 (100%) indicated that they used internet, 11 (73.3%) said they used email. Seven (46.7%) respondents indicated that they have and use intranet, and 8 (53.3%) alluded to using Facebook. Three (20%) indicated that they used videoconferencing and 1 (6.7%) respondent said they used LinkedIn. It should be noted that respondents were only asked if they used the said technologies and not if they used them to share knowledge. The use of these technologies at TML, although they are not necessarily used for sharing knowledge, confirms what the literature suggests they are enablers of knowledge sharing. In fact, Shanhong (2000:7) argued that the application of information technologies enlarges the scope of knowledge acquisition, which is a key process in managing knowledge. Ramirez (2007:10) concurred with Shanhong and stated that information technology makes probable the connections that enable knowledge sharing, but it does not motivate staff to share their knowledge. Given the importance of these technologies and the fact that TML already has them, using these technologies may go a long way in harnessing what they already have in terms of knowledge sharing.
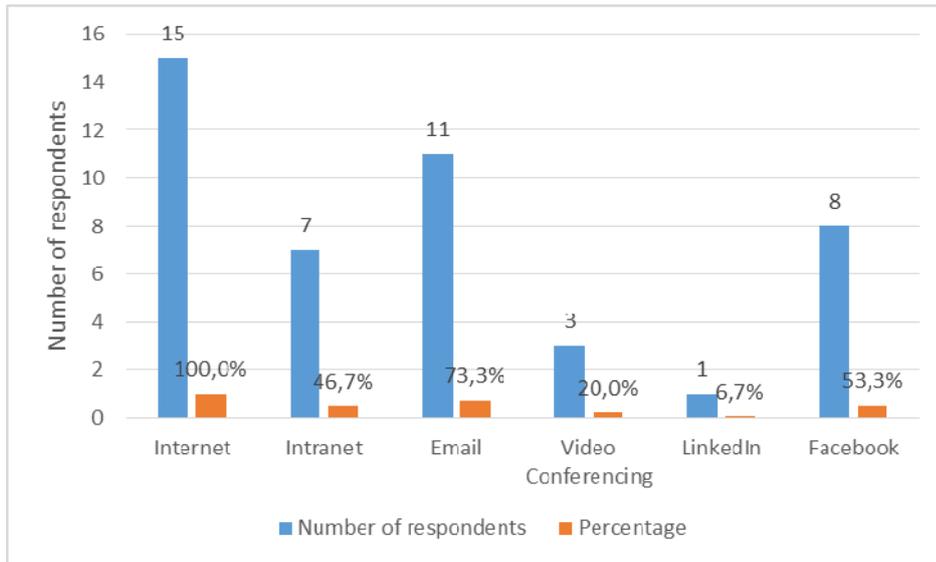
Figure 4.9: Technologies that are in use at TML

4.2.5 Knowledge-sharing tools (human-based tools)

One of this study's objectives was to identify the knowledge-sharing tools, both technological based and human based. Regarding the human-based knowledge-sharing tools, those that were identified in the literature review section, including the CoPs, mentorship programs, job rotation, the use of storytelling and job shadowing. The question on these knowledge-sharing tools sought to find out those that are in use at TML. As indicated in figure 4.10 below, only two of these tools are reflected as used at TML. Two (13.3%) of the respondents thought mentorship programs are in use and 6 (40%) indicated the use of job rotation for knowledge sharing. Alarmingly, the largest number of respondents (7 (46.7%)) decided not to answer this question. In reviewing the literature on the human-based knowledge sharing, Ramirez (2007:5) stated that most knowledge is shared socially, e.g. face-to-face or telephone conversations. Organizational efforts should be focused on creating opportunities for employees to interact, whether formally or informally, to nurture knowledge sharing. Moreover, Ramirez (2007:5)

suggested that an organization could develop a mentorship program to transfer subtle and private skills and experiences to others in a gentle way. The mentor is not explicit in the sharing of knowledge, but will role model the behaviors he or she finds to be effective. The chapter on literature review identifies other human-based knowledge-sharing tools, which, according to this study findings, are not in use at TML and this suggests that a lot still needs to be done regarding knowledge-sharing tools. These tools include CoPs, job shadowing and storytelling.

According to Cabrera and Cabrera (2010:6), CoPs represent another way of organizing work interactions that can also be very effective for leveraging knowledge flows. A CoP is an emerging social collective where individuals working on similar problems self-organize to assist each other and share perspectives about work practice, resulting in learning and innovation within the community. Ramirez (2007:6) added that CoPs may be developed informally and become self-selecting. Moreover, Holbeche (2005:163) noted that in order for knowledge and learning to be shared and re-used, it first has to be surfaced. Storytelling, among oral history techniques, is gaining popularity. For an organization, storytelling is one of the most powerful ways to share knowledge and shape behavior.
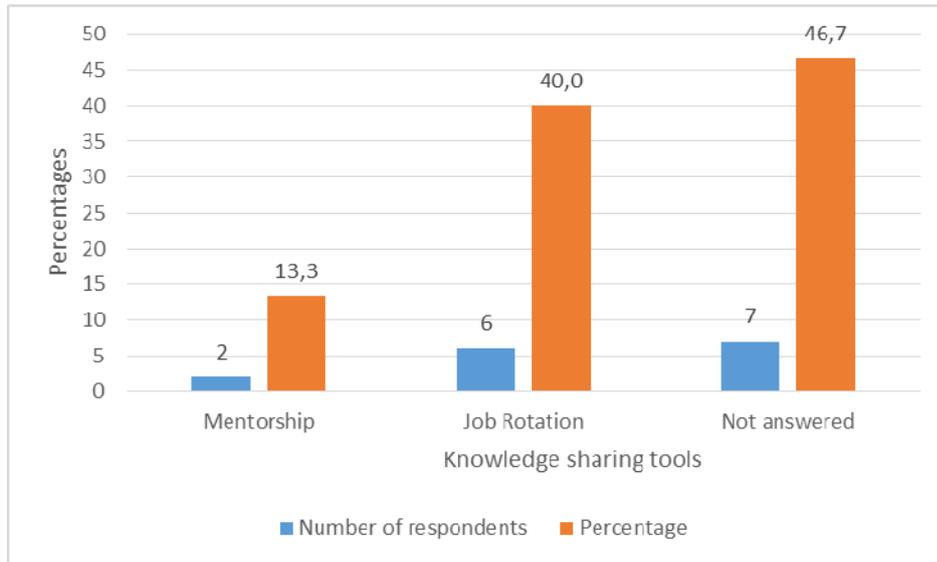
Figure: 4.10: Knowledge-sharing tools

4.2.5.1 Knowledge-sharing processes

As shown in Chapter Two it was stated that when senior and knowledgeable employees leave an organization, they could take with them knowledge that afforded the organization a competitive advantage, for instance, extensive personal relationships with decision-makers in major customer organizations (Martins and Martins 2011:61). The aim of this section was to discover if TML has any practices in place for retaining knowledge from their employees. Table 4.3 below presents confusing and contradicting views from the respondents. For instance, 46% of respondents indicated that TML librarians are usually rotated in various departments. This is in contradiction to the view held by another 50% that, at times, resigned or retired employees are recalled to assist with activities because the remaining staff were unable to perform these functions. This, therefore, leaves one to ask about the effectiveness of rotating staff if resigned or retired employees could be recalled. The summary of knowledge-sharing processes as they apply to TML are presented in the table below.

Statement	Agree	Strongly agree	Not sure	Disagree	Strongly disagree
Whenever new employees are hired at TML, they are allocated a mentor	2 (15.4%)	2 (15.4%)	4 (30.8%)	1 (7.7%)	4 (30.8%)
Have any of the resigned employees ever been recalled to assist with library activities because no one in the library knew how to perform these activities?	6 (50%)	2 (16.7%)	2 (16.7%)	2 (16.7%)	0%
Have any of the retired employees ever been recalled to assist with library activities because no one in the library knew how to perform them?	5 (41.7%)	4 (33.3%)	1(8.3%)	2 (16.7%)	0%
Do you belong to a formal grouping in the library where you share work-related activities?	6 (42.9%)	5 (35.7%)	2 (14.3%)	1 (7.1%)	0%
Are TML librarians usually rotated among various departments such as cataloguing, technical services, etc.?	6 (46.2%)	4 (30.8%)	2 (15.4%)	1 (7.7%)	0%
Do librarians at TML share knowledge by way of blogging?	1 (8.3%)	4(33.3%)	3 (25%)	4 (33.3%)	0%
Do librarians at TML share knowledge by way of Facebook?	2 (14.3)	5 (35.7%)	3 (21.4%)	4 (28.6%)	0%

Table 4.8: Knowledge-sharing processes

In comparison, there was a question to the interviewees regarding the circulation of knowledge at TML in which the researcher wanted to find the extent to which knowledge is lost at TML. Particularly, the respondents were asked if any of the retired or resigned employee have been recalled to assist the Library because their knowledge was not

captured when they left. All the interviewees answered positive to this question. The following are the responses from the respondents.

> ***Respondent 1:*** *Right now, as we speak, there is someone who has been recalled to come and assist. I am not sure with what and, in fact, this is the second time that she is being recalled. The first time she was called she was even assigned mentees in order to transfer that knowledge to them. So, it would seem to me that the skill was not transferred.*

> ***Respondent 2:*** *Currently, we have someone who is recalled. Unfortunately, this is the second time she is called because we had incidences of deaths in the Library of people she mentored so she had to be recalled. Also during the university restructuring excise, we lost a number of skilled personnel through voluntary resignations and their departure was not effectively planned in terms of skills transfer.*

4.2.5.2 Knowledge-sharing practices

The literature review identified that knowledge sharing improves the quality of service delivery of organizations, particularly more service-oriented organizations rather than organizations producing goods as their products (Ismail and Yusof 2010:1). Therefore, the aim of this section is to further find out if there are any knowledge-sharing practices available at TML and from this type of a question, multiple responses were expected. On the question regarding knowledge-sharing practices currently being used at TML, the statistics below shows that the majority of respondents (11 (100%)) believed they were being trained and developed, 4 (36.4%) said they made use of lessons learned, 2 (18.2%) said they used action learning and 1 (9.1%) said they were being rewarded for sharing

knowledge. One (9.1%) respondent said the environment at TML is open for them to share knowledge. From the statistics above, it is evident that the majority of respondents held the view that they are being trained and developed at TML and there seems to be a correlation between the findings of this study and what Hsu (2008:1319) suggested when he stated that knowledge-sharing practices such as training and development equip employees with idiosyncratic knowledge that is more valuable to the organization than to its competitors. A considerable number of respondents also concurred with Holbeche (2005:165) regarding the use of action learning as a knowledge practice. He opined that action learning involves participants meeting in small groups, with or without a facilitator. Group members ask each other questions about how they view the problems that are being considered, the idea being that each member should act as a mirror to help the group recognize what it does not know.

4.2.5.3 Knowledge-sharing culture

The results of this study showed that although knowledge sharing happens on an informal basis, the culture of knowledge sharing exists at TML. In fact, the majority of respondents (7 (46.7%)) indicated that a culture of knowledge sharing do exist at TML. Surprisingly also, 5 (33.3%) of the respondents said that a knowledge-sharing culture does not exist and, considering the fact that this is also the large number, one can only wonder if respondents understand what a knowledge-sharing culture is. A small number 3 (20%)) of respondents remained silent on the question of culture. In reviewing the literature, De Long and Fahey (2000:115) observed that the benefits of a new technology infrastructure were incomplete if long-standing organizational values and practices were not supportive of knowledge sharing across units. Similarly, Cabrera and Cabrera (2010:10) argued that organizational culture could impact on knowledge sharing in two different ways. Firstly,

they asserted that culture could influence knowledge sharing by creating an environment in which there are strong social norms regarding the importance of sharing one's knowledge with others. Secondly, they suggested that culture influences knowledge sharing by creating an environment of caring and trust that are vital for encouraging employees to share with others. Therefore, regarding the existence of a knowledge-sharing culture at TML, the results of this study seem to be a reflection of what the literature suggests.
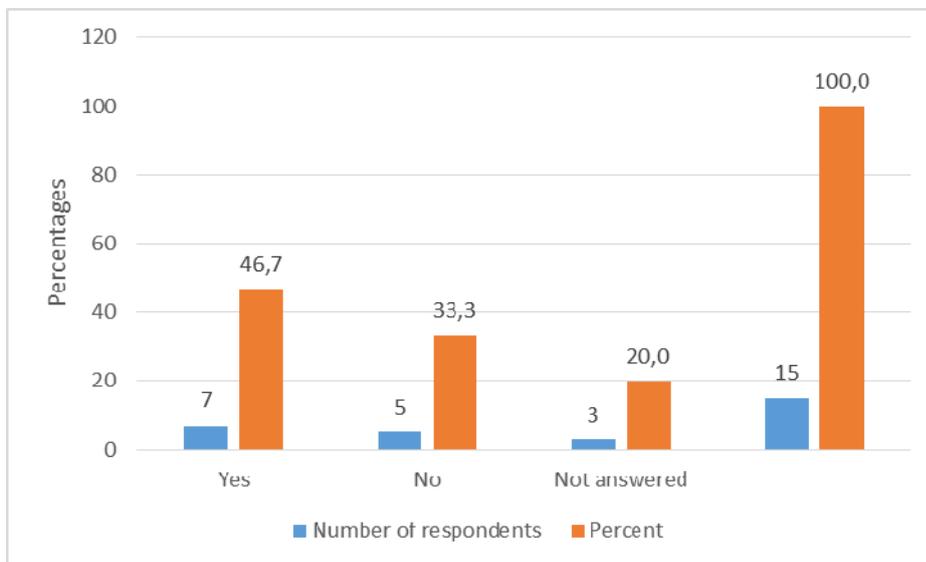
Figure 4.11: Knowledge-sharing culture

4.2.5.4 Knowledge-sharing activities

As can be noted from figure 4.12 below, the respondents were asked to indicate the extent to which they agreed with the usage of knowledge-sharing activities such as brainstorming sessions, workshops, meetings, etc. The majority of respondents alluded to the fact that the above-mentioned knowledge-sharing activities are indeed in use at TML. This is in concurrence with what Ramirez (2007:6) suggested when he said that organizations should establish opportunities for interaction among its employees.

Similarly, Al-Alawi, Al-Marzooqi and Mohammed (2007:25) further opined that organizations that encourage open discussions among employees can make knowledge sharing easy and successful, create new knowledge and reduce the costs of trial-and-error. In fact, the majority of respondents, (7 (46.7%)) agreed to the question, 4 (26.7%) strongly agreed, 2 (13.3%) strongly disagreed and 1 (6.7%) indicated that they were not sure. Moreover, 1 (6.7%) respondent disagreed to the statement.
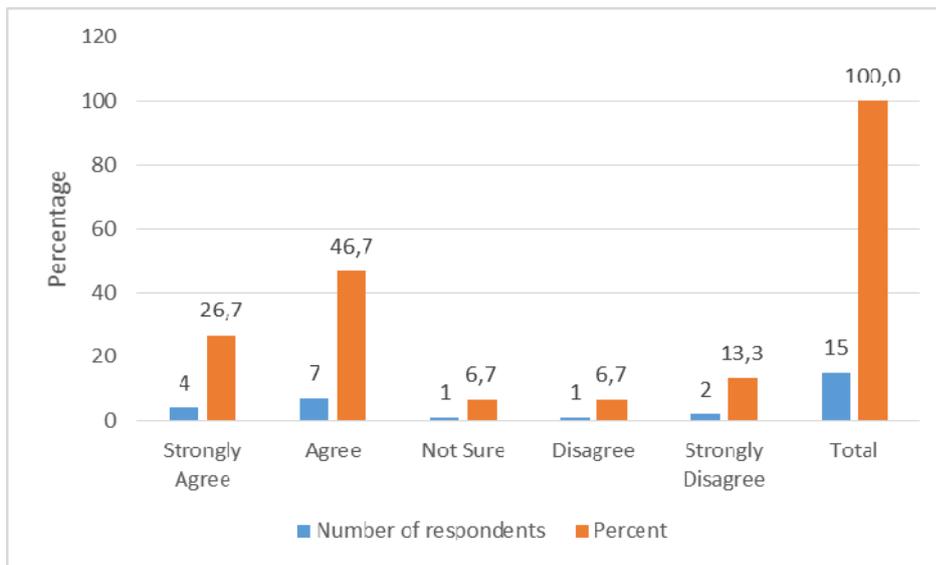
Figure 4.12: Knowledge-sharing activities

4.2.5.5 TML organizational structure and incentives provision

On the TML organizational structure, the respondents were asked to state if the organizational structure allows for ease of knowledge sharing. The majority of respondents (totaling 6 (40%)) agreed with the statement while 1 (6.7%) strongly agreed. Four (26.7%) respondents were not sure, while 2 (13.3%) disagreed and 2 (13.3% strongly disagreed. There seems to be consensus between the views held by the majority of respondents and the literature under the critical success factors of knowledge sharing suggest. For instance, Wang and Noe (2010:119) and Tagliaventi and Mattarelli 2006:296

opined that functionally segmented organizations are likely to impede knowledge sharing across functions and CoPs. They stated that knowledge sharing may be facilitated by having less centralized organizational structure. Ramirez (2007:9) concurred with Wang and Noe in their assertions and said that organizational demographics, especially large size and formal status differentials, have a negative influence on knowledge sharing. With regard to the provision of incentives, respondents held different views on whether or not incentives to share knowledge are provided at TML. For instance, 4 (26.7%) of respondents agreed that there is provision of incentives. The second largest number of respondents (3 (20%)) disagreed and 3 (20%) strongly disagreed. However, only 1 (6.7%) indicated that they agreed with the statement and another 1 (6.7%) was not sure. Three (20%) remained silent on the question. The reviewed literature suggested that the absence of incentives is directly linked to knowledge hoarding. To this end, Arzi, Rabanifard, Nassajtarshizi and Omran (2013:5) contended that absence of incentives has been suggested to be a main obstacle to knowledge sharing across cultures. They argued further that incentives, including recognition and rewards, have been suggested as interventions to ease knowledge sharing and help build a supportive culture.

For Islam, Ahmed, Hasan and Ahmed (2011:5903) an effective reward system is essential to motivate employees to share knowledge among themselves and between different departments, because, in the absence of proper motivation, some employees may be unwilling to share knowledge due to fear of loss as a result of this action. The statistics on TML organizational structure and incentives provision are summarized in table 4.5 below.

Statement	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
The TML organisational structure allows for ease of knowledge sharing	1 (6.7%)	6 (40%)	4 (26.7%)	2 (13.3%)	2 (13.3%)
The library provides incentives to encourage knowledge sharing	1 (6.7%)	4 (26.7%)	1 (6.7%)	3 (20%)	3 (20%)

Table 4.9: TML organizational structure and incentives provision

4.2.5.6 Knowledge-sharing obstacles

As can be seen from table 4.6 below, the respondents were requested to indicate which of the provided knowledge-sharing obstacles applied to their library, and multiple responses were expected. From the statistics below, it is clear that the respondents held different views on the obstacles to knowledge sharing. However, the majority (6 (40%)) of respondents were of the view that a lack of trust among employees was the greatest obstacle to knowledge sharing. The second greatest obstacle to knowledge sharing as held by the respondents was a lack of participation and the difference in qualifications of 4 (26.7%). Other respondents 4 (26.7%) believed that the concepts of knowledge is power mentality also hinders knowledge sharing. This was followed by 3 (20%) respondents who held the view that age difference and difference in qualifications were obstacles to knowledge sharing at TML. One (6.7%) pointed lack of rewards as an obstacle to knowledge sharing. Two (13.3%) fell within the category "other'' and were of the opinion that the mentees had a negative attitude towards their mentors and that TML staff seem to be selfish. As it can be noted from the statistics above, the majority of respondents held the view that trust seems to be a major obstacle to knowledge sharing at TML. These findings are, therefore, in agreement with the reviewed literature in Chapter Two. For

example, Ngulube (2005:54) postulated that lack of trust among employees may be detrimental to knowledge sharing in an organization. Riege (2005:24) also pointed out that a number of other knowledge-sharing obstacles which were also in agreement with the findings of this study among which are differences in experience levels, age differences and differences in education levels, and lack of trust in people because they may misuse knowledge or take unjust credit for it. A significant number of respondents also held the view that the concept of **knowledge is power** hinders knowledge sharing. This is in line with the suggestion made by Ramirez (2007:4) when he suggested an alternative view of the **knowledge is power** struggle in inherent tension between workers and the organization for which they work over who owns and controls their knowledge. This tension stems from the idea that knowledge is a resource with a significant amount of possible status and power and results in turf wars (Ramirez 2007:4).

Obstacles	Number of respondents	Percentage	Percentage of cases
Knowledge is power mentality	4	14,8%	26.7%
Age difference	3	11,1%	20%
Difference in experience	3	11,1%	20%
Difference in qualifications	4	14,8%	26.7%
Lack of trust	6	22,2%	40%
Lack of rewards	1	3,7%	6,7%
Lack of participation	4	14,8%	26,7%
Other	2	7,4%	13,3%

Table 4.10: Knowledge-sharing obstacles

4.2.5.7: Ways in which TML does not support knowledge sharing

Here the researcher sought to find out from the respondents, ways in which TML management does not support knowledge sharing and multiple responses were expected from this type of a question. It is evident from the statistics below that the majority of

respondents thought TML management does not support knowledge sharing not communicating (5 (45.5%)). Another faction (4 (36.4%)) held the view that they were not provided the platform to share their knowledge with their colleagues. Moreover, 3 (27.3%) thought rewards were vital in encouraging knowledge sharing, yet they were not being rewarded. The other respondents (4 (36.4%)) fell within the category of "'other'" with replies like "it seems they do not know about it" and the fact that they do not encourage workshops. The fact that the majority of respondents held the view that management does not seem to support knowledge sharing at TML is worrying considering what the literature suggests in terms of the relationship between management support and knowledge sharing. For example, Gressgard and Nesheim (2014:30) and Connelly and Kelloway (2003:297 opined that management support for knowledge sharing has been shown to be related to employees' observations of a knowledge-sharing culture and readiness to share knowledge. Meanwhile, Hsu (2008:1319) said that values held by top management advocate how organizational members should conduct themselves, how they should run the business, and what kind of organization they should build. In addition, management values underlie organizational culture that pushes for organizational knowledge sharing (Hsu 2008:1319). Thus, the initiation and implementation of organizational knowledge-sharing practices should begin with a top management value that recognizes knowledge as a source of competitive advantage.

One way in which management can show support for knowledge sharing is by the provision of rewards. In this regard, Iqbal, Toulson and Tweed 2012:3) opined rewards promotions and recognition should be given to those employees who spend their time facilitating and working with other staff, especially in a knowledge- collaboration.

4.2.5.8 Critical success factors of knowledge-sharing

One of this study's objectives was to find the critical success factors of knowledge sharing and the results are as follows.

4.2.5.8.1 Knowledge-sharing and incentives

Regarding the knowledge-sharing incentives, the researcher wanted to know if any incentives are offered to encourage knowledge sharing. The statistics below (3 (27.3%) respondents) indicated that staff promotion was used for encouraging knowledge sharing. Meanwhile, 2 (18, 2%) of respondents were of the opinion that TML used monetary rewards to encourage knowledge sharing. The rest of the respondents (6 (66.7%)) fell within the "other'' category with others stating that the research and conference committee ensures that individuals will be sponsored to attend a conference if they are prepared to present a paper, thus, sharing knowledge taking place externally upon returning from the conference. The incentive therefore is sponsoring individuals that share knowledge in future conferences provided they share knowledge with their colleagues. Another respondent stated that, as far as he is concerned, there are no incentives for staff for sharing their knowledge. In reviewing the literature, it was evident that knowledge sharing is directly related to expectation of provision of incentives. For instance, Ramirez (2007:7) identified the need for incentives to motivate employees to share their knowledge as opposed to hoarding it. To properly encourage knowledge contributions, organizations must re-align incentive schemes to precisely account for these vital contributions. Similarly, Islam et.al (2011:5903) posited that an effective reward system is crucial to motivate employees to share knowledge among themselves and between

different organizations because, in the absence of proper motivation, some employees may be reluctant to share knowledge because of fear of loss as a result of this action.

The incentives provided to employees should be both short term, e.g. bonuses, and long term, e.g. salaries and promotions, etc. to reflect the organization's short- and long-term focus (Ramirez, 2007:7). Cornelia and Kugel (as cited in Islam et al, 2011:5903) further found that monetary rewards have an immediate effect on motivation to share knowledge.

However, it is important to also note that in reviewing the literature, it became evident that incentives are not always linked to improved knowledge sharing. For instance, Walter, Ribiere and Galipeau (2013:4) claimed that using rewards and incentives would have a negative effect, because of a motivational crowding-out effect. They suggested that monetary rewards would undermine intrinsic motivation, especially when the intrinsic motivation was already strong. Problems with rewards arise where it is not clear who should get the reward, since new developments most often based on previous work (Walter, Ribiere and Galipeau 2013:4).

4.2.5.8.2 Knowledge-sharing motivations

Regarding knowledge-sharing motivations, respondents were asked to indicate from the provided list of motivations, those that they considered reasons for sharing knowledge at TML and it was expected that this question would attract multiple responses. As can be seen from the statistics below, the majority of respondents (6 (75%)) thought they share knowledge in order to enhance service delivery at the Library. This seems to be line with what Islamil and Yusof (2010:1) stated, that a remarkable contribution of knowledge sharing is improving the quality of service delivery of organizations, particularly public organizations and these organizations are more service oriented rather than producing

goods and products. This was followed by 3 (37.5%) respondents who held the view that they share their knowledge in order to be trained and developed and of those whose opinion was to enhance productivity. This is in line with what Ramirez (2007:7) noted that training and development can also impact on knowledge sharing. Often, employees do not use knowledge-sharing technology and tools simply because they are not sure how they work or do not understand what behaviors they are expected to practice. Organizations must warrant that employees are provided with training regarding the technology tools to support knowledge sharing, as well as the manners that they are expected to show (Ramirez, 2007:7). Moreover, Cabrera and Cabrera (2010:8) purported that cross-training would facilitate knowledge sharing among employees from various areas by increasing interaction, creating a common language, building social ties and increasing employees' awareness of the demands of different jobs. Two (25%) respondents stated that they shared knowledge to be rewarded. A small percentage of respondents (1 (12.5%)) fitted into the "'other" category, that held the view that knowledge sharing enhances relations at the workplace and among colleagues. This in concurrence to what Wang and Noe (2010:118) who stated that lack of rewards has been suggested to be a barrier to knowledge sharing across cultures. Furthermore, the expectancy theory (Vroom, 1964) states that intentions to perform a certain action are partly determined by consequence expectations. Therefore, sharing knowledge may be partially determined by the rewards an employee perceives are associated with such behavior (Cabrera et al, 2006:250).

4.3.7 Summary

This chapter has dealt with data presentation, analysis and interpretation. According to the interpretation, it is generally clear that TML faces knowledge loss, resulting from non-

circulation of knowledge within the Library. If not addressed, this knowledge loss could pose serious problems to service delivery. A number of positives, however, were noted regarding knowledge-sharing practices. The next chapter will present the summary of major findings and conclusions of, and recommendations to this study.

CHAPTER FIVE: SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5. Introduction

Chapter Four dealt with data presentation, analysis and interpretation. The chapter also discussed the findings as they relate to the study's objectives. This chapter presents the summary of major findings, conclusions and recommendations.

5.1 Summary of major findings

The researcher had envisaged in Chapter One that organizations, including academic libraries, are faced with the problem of knowledge loss that results in ineffective service delivery because of non-circulation of knowledge. The researcher, therefore, believed that this knowledge loss could be addressed through knowledge sharing. The reviewed literature supported this conjecture that knowledge sharing could be used to improve service delivery. For instance, Maponya (2004:2) suggested that knowledge sharing is one of the feasible means by which academic libraries could improve their services. Similarly, Jantz (2001:34) held the view that if libraries use and share their knowledge, it will improve their service. In addition to that, Mavodza and Ngulube (2011:15) said that some academic libraries in the developed world have significantly developed and are applying some KM principles and practices in the provision of library services. At TML, the study revealed that knowledge is mainly lost through challenges like resignations and retirements and, above all, lack or absence of management of these challenges.

In order to address the above challenges, the literature review identified two types of tools, knowledge sharing enabling technologies and non-technological mechanisms. This study investigated these two types of knowledge-sharing tools and the results were

presented, analyzed and interpreted in Chapter Four. The summary of findings is presented based on the objectives as outlined in Chapter One.

5.1.1 The understanding of knowledge sharing at TML

First of all, the researcher wanted to find out from the respondents, the general opinion or understanding of knowledge sharing at TML. In this regard, the study revealed that knowledge sharing was a known concept at TML. In fact, the majority of respondents held the view that knowledge sharing is important to service delivery. Respondents also held the view that knowledge sharing may assist TML staff members to solve problems through exchanging ideas. Furthermore, the study sought to find out if knowledge sharing is structured at TML and, to this end, the study revealed contradictory responses from data gathered through questionnaires and interviews. While the majority of respondents through questionnaires thought knowledge sharing is formalized at TML, data collected by means of interviews revealed that knowledge sharing is not formalized. The research therefore concludes that, in line with the literature, the sharing of knowledge is not formalized at TML but it happens on an ad hoc basis.

Additionally, the study sought to find the position of knowledge management at TML. To this, the study revealed contradictory responses from respondents, with others arguing that KM is practiced on an ad hoc basis, while others said it is not practiced at all. Moreover, the majority of respondents did not answer the question on whether the Library has a system for retaining knowledge from experienced staff and the study thus concludes that there is no system for retaining knowledge from experienced staff.

5.1.2 Knowledge-sharing practices at TML

The study sought to find out if exit interviews were held for staff leaving TML. In this regard, the data gathered through both the questionnaires and interviews revealed that nothing was done to retain their knowledge. Moreover, the results of the study showed that TML does not have a system for documenting the problems solved.

5.1.3 Tools for sharing knowledge

The literature review identified two types of knowledge-sharing tools, namely technology-based and human-based tools. The results showed that TML does have the technology-based knowledge-sharing tools, although they are not used for sharing knowledge among staff members. Regarding the human-based tools for knowledge sharing, the results indicated that a couple of these, such as job rotation and mentorship programs, are in use. However, the majority of respondents remained silent on human-based knowledge-sharing tools and the study thus concludes that these tools do not exist at TML.

5.1.4 Critical success factors of knowledge sharing

The findings of this study revealed conflicting responses regarding the provision of incentives in encouraging knowledge sharing among TML staff members. While the majority of respondents agreed to the provision of incentives, others held the view that TML does not provide any incentives to encourage knowledge sharing.

Moreover, the study sought to find the motivations, if any, for knowledge sharing. According to the results, the majority of respondents were of the view that they share knowledge in order to enhance service delivery.

5.1.5 Knowledge-sharing obstacles

The results of the study revealed a variety of obstacles of knowledge sharing at TML, namely a lack of trust and the difference in qualifications. The study also revealed that the concept of 'knowledge is power' mentality hinders knowledge sharing. Moreover, the study also pointed to a lack of rewards as an obstacle to knowledge sharing.

5.2 Conclusions

This study had intended to find out if knowledge sharing could be used as a tool to improve service delivery in the National University of Lesotho Library. In line with the objectives of this study, it is concluded that although knowledge sharing is not formalized at TML, it is considered important to service delivery.

Again, the results of the study also showed that the critical knowledge-sharing activities such as exit interviews were not held for staff members leaving the organization. Furthermore, it became apparent from the study results that the Library does not have a system for documenting the problems solved.

Meanwhile, the study concluded that TML does have the technology-based knowledge-sharing tools, although they are not used specifically for sharing knowledge. Regarding the human based knowledge sharing tools, the results of the study showed that only job rotation and mentorship programs are in use. Other human-based knowledge-sharing tools like CoPs, job shadowing, storytelling do not exit.

Regarding the critical success factors of knowledge sharing, the study revealed the conflicting views regarding the provision of incentives in order to encourage knowledge sharing.

The last objective of this study related to discovering the obstacles of knowledge sharing and the results indicated lack of trust among colleagues and their difference in qualifications. Other obstacles of knowledge sharing revealed in this are the mentality of 'knowledge is power' and lack of rewards.

5.3 Recommendations

The last objective of this study was to make recommendations for further research. There is a need to redesign the edifice of academic libraries in order for them to provide improved services to their clientele. Academic libraries, therefore, need to recognize the knowledge they possess and how best they could use it to achieve the overall objective of providing effective service to its clients.

- It became clear from the study findings that, although knowledge sharing is happening, it is fairly unstructured. This suggests to TML that more work still needs to be done in this regard. The TML management needs to encourage and lead a culture where knowledge sharing is promoted.

- The Library should formalize knowledge sharing. This should be done by formulating the desired policies.

- The Library should encourage the transfer of knowledge from experienced staff members to new staff members. A structured mentoring system should be established to help new staff members to acquire knowledge from more knowledgeable ones. CoPs should also be established for members to interact and exchange ideas.

- The researcher believes there should be an incentive and a reward system that are directly linked to knowledge sharing. This system should be clearly communicated to and understood by staff members. The result of this system should be such that, the staff is clear of what is expected of them and consequently motivates them to share their knowledge.

- It is recommended that TML management should develop a KM strategy, clearly detailing the intended objectives.

- It has been established from the reviewed literature that IT is one of the enablers of knowledge sharing. Although questionnaire results show that there are various knowledge-sharing technologies at TML, it became evident that these technologies are not currently used effectively to share knowledge. It is recommended that TML management should outline the benefits of knowledge sharing and the importance of IT in this regard so that the already existing infrastructure could be put to good use. The researcher also proposes the establishment of an organizational repository that would be accessible to all staff members. This repository should contain not only explicit and tacit knowledge, but also the lesson-learned. Microsoft SharePoint would be a starting point.

- It is recommended that TML management should investigate all the identified obstacles that inhibit knowledge sharing in a way that clearly make staff understand the benefit that would be gained from sharing knowledge. An example would be for the management to create an environment of trust and interaction among staff and in the process engage staff in order to have their buy-in.

5.3 Suggestion for further research

The study was only confined to the Library on the main campus. The researcher had anticipated that the findings would be adequately representative of the entire university library. However, the researcher proposes that the findings of this study be tested by including opinions from the other three campuses.

5.5 Final Conclusion

This study established that there is critical tacit and explicit knowledge that is produced at TML and therefore, should be hitched, captured and retained for future use. TML lack proper knowledge retention mechanisms to capture and retain acute knowledge that is acquired in the Library. Furthermore, this study established that knowledge sharing is not formalized at TML but it happens only in an ad hoc basis. This has been justified by the fact that sometimes the retired individuals are recalled to assist whenever problems related to work emerge. Moreover, the study found that even though knowledge sharing technologies exist at TML, they are not used effectively in sharing knowledge among staff.

5.5 List of references

Abbajay, M. 2013. *The working life: the importance of workplace mentors*. http://www.careerstonegroup.com/z-media/wp-mentoring.pdf (Accessed 21 June 2014).

Abell, A & Oxbrow, N. 2001. *Competing with knowledge: the information professional in the knowledge management age*. London: Facet Publishing.

Akamavi, N & Kimble, C. 2005. *Knowledge sharing and computer supported collaborative work: the role of organizational culture and trust*. http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.207.39 (Accessed 8 May 2015).

Al-Alawi, AI. Al-Marzooqi, NY & Mohammed, YF. 2007. Organizational culture and knowledge sharing: critical success factors. *Journal of knowledge management* 11(2): 22-42. http://ptarpp2.uitm.edu.my/silibus/orgCultre.pdf (Accessed 17 July 2014).

Alavi, M & Leidner, DE. 2001. Knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS quarterly*, 25(1):107-136.

Andeniran, P. 2011. User satisfaction with academic libraries services: academic staff and student perspectives. *International journal of library and information science 3(10):209-216.* http://www.academicjournals.org/article/article1379677117_Adeniran.pdf (Accessed 23 May 2014).

Anderson, G & Arsenault, N. 1998. *Fundamentals of education research.* London: RutledgeFalmer.

Andriessen, JHE. 2006. *To share or not to share, that is the question: the Conditions for the willingness to share knowledge.* http://www.tbm.tudelft.nl/fileadmin/Faculteit/TBM/Onderzoek/Onderzoeksportfolio/Innovation_Systems/Delft_Innovation_System_Papers/doc/Manuscript_Knowledge_Sharing.2.pdf (Accessed 4 May 2014).

Arora, R. 2002. Implementing KM – a balanced score card approach. *Journal of knowledge management* 6 (3):240-249.

Arzi, S, Rabanifard, N, Nassajtarshizi, S & Omran, N. 2013. Relationship among reward system, knowledge sharing and innovation performance. *Interdisciplinary journal of contemporary research in business* 5 (6):1-27.

Asogwa, B. 2012. Knowledge management in academic libraries: librarians in the 21st century. *Journal of knowledge management practice*, 13(2):1-11. http://www.tlainc.com/articl301.htm (Accessed 30 March 2014).

Averweg, UR. 2008. Developing an intranet towards knowledge sharing: a practitioner-based inquiry. *South African journal of information management* 10(1):1-13. www.sajim.co.za/index.php/SAJIM/article/download/7/7 (Accessed 19 July 2014).

Aramburu, N & Sáenz, J. 2011. *People-focused knowledge sharing Initiatives in medium-high and high technology companies: organizational facilitating conditions and impact on innovation and business competitiveness.*
http://www.irma-international.org/viewtitle/52900/ (Accessed 8 May 2015).

Avasia, M & Ghosh, M. 2002. *Intranet, extranet and internet: Information management and sharing in libraries.*
http://www.researchgate.net/profile/Maitrayee_Ghosh/publication/28805364 (Accessed 8 May 2014).

Babbie, E. 2001. *The practice of social research*. Cape Town: University press.

Babbie, E. 2010.*The Practice of Social Research*, Belmont California: Wadsworth, Cengage Learning.

Babonea, A & Voicu, M. 2011. *Questionnaires pretesting in marketing research*. cks.univnt.ro/uploads/cks_2011_articles/index.php?dir=02. (Accessed 23 September 2015).

Bessick, J & Naicker, V. 2013. Barriers to tacit knowledge retention: an understanding of the perceptions of the knowledge management of people inside and outside the organization. *SA journal of information management* 15(2):1-8.
http://www.sajim.co.za/index.php/SAJIM/article/viewFile/556/646 (Accessed 15 May 2014).

Bernard, HR. 2011. *Research methods in anthropology: qualitative and quantitative approaches*. 5th ed. Lanham: AltaMira Press.

Binz-Scharf, MC. 2003. Exploration and exploitation: toward a theory of knowledge sharing in digital government projects. Master's thesis, Universität St. Gallen.
http://www1.unisg.ch/www/edis.nsf/syslkpbyidentifier/2828/$file/dis2828.pdf (Accessed 19 June 2014).

Boote, DN & Beile, P. 2005. Scholars before researchers: on the centrality of the dissertation literature review in research preparation. *Journal of educational researcher 34(6):3-15.*
http://www.sagepub.com/mertensstudy/articles/Ch_3-1.pdf (Accessed 20 June 2014).

Boulos, MNK, Maramba, I & Wheeler, S.2006. *Wikis, blogs and podcasts: a new generation of web-based tools for virtual collaborative clinical practice and education.*
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1564136/ (Accessed 3 July 2014).

Bouthillier, F & Shearer, K. 2002. Understanding knowledge management and information management: the need for an empirical perspective.
www.informationr.net/ir/8-1/paper141.html (Accessed 26 May 2014).

Bhattacherjee, A. 2012. *Social science research: principles, methods and practices*. Florida: Creative commons.

Bhojaraju, G. 2005. Knowledge management: why do we need it for corporate? *Malaysian journal of library and information science,* 10 (2): 37-50. www.eprints.rclis.org/7158/1/KM_why_do_we_need_for_corporate.pdf (Accessed 13 August 2013).

Bragg, S. 2014. *Human resource guide.* http://www.accountingtools.com/questions-and-answers/what-is-job-shadowing.html (Accessed 8 May 2014).

Bryman, A. 2004. *Social research methods.* 2nd edition. New York: Oxford university press.

Cabrera, A, Collins, WC & Salgado, JF. 2006. Determinants of individual engagement in knowledge sharing. *International of human resource management* 17(2): 245-264. http://engagementresearch.wikispaces.com/file/view/%5BIJHRM%5D+Cabrera+(2006)_Determinants+of+individual+engagement+in+knowledge+sharing.pdf (Accessed 20 June 2014).

Cabrera, EF & Cabrera, A. 2010. *Fostering knowledge sharing through people management practices.* http://orff.uc3m.es/bitstream/handle/10016/7140/fostering_cabrera_IJHRM_2005_ps.pdf?sequence=2 (Accessed 15 October 2014).

Calantone, RJ, Cavusgil, ST & Zhao, Y. 2002. Learning orientation, firm innovation capability and firm performance. *Journal of industrial marketing management* 31:515-524.

Choo, CW. 2000. Working with knowledge: how information professionals help organisations manage what they know. *Journal of library management* 21(8): 395-403. http://choo.ischool.utoronto.ca/LM/lm.pdf (Accessed 17 June 2014).

Connaway, LS & Powell, RR. 2010. *Basic research methods for librarians*, 5th edition, USA: Greenwood publishing group.

Connelly, CE & Kelloway, EK. 2003. Predictors of employees' perceptions of knowledge sharing cultures. *Leadership and organization development journal* 24(5):294-301. https://wikis.uit.tufts.edu/. (Accessed 20 June 2014).

Cornelia S, Kugel, J. 2004. *Rewards for knowledge sharing.* www.gurteen.com/gurteen/gurteen.nsf/id/rewards-k-sharing (Accessed 23 September 2015).

Cresswell, JW. 2003. *Research design qualitative, quantitative and mixed methods approaches.* 2nd edition. London: Sage Publications.

Creswell, JW & Clark, P.2007. *Designing and contacting mixed methods research.* Thousand Oaks: CA. Sage.

Christensen, PH. 2007. Knowledge sharing: moving away from the obsession with best practices. *Journal of knowledge management* 11(1):36:47.

Cronin, P, Ryan, F & Coughlan, M. 2008. Undertaking a literature review: a step-by-step approach. *British journal of nursing* 17(1):37-43.

Crowley, B. 2001. Tacit knowledge, tacit ignorance, and future of academic librarianship: paper presented at the 2001 conference on knowledge management for academic librarians sponsored by Dominican University's center for knowledge management, March.

Dalkir, K. 2005. *Knowledge management in theory and practice.* Boston: Elsevier.

Davenport, TH & Prusak L. 1997. *Working knowledge: how organizations manage what they know.* Boston: Harvard business school press.

Davenport, TH, De long, DW & Beers, MC. 1998. Successful knowledge management projects. S*loan management review 39, 43-57.* https://www.ischool.utexas.edu/~i385q/readings/Davenport_DeLong-1998-Successful.pdf (Accessed 29 July 2014).

Degrandpre, S. 2009. *Workplace mentoring: sharing knowledge is power.* http://susandeg.wordpress.com/2010/03/12 (Accessed 7 November 2013).

Desouza, K & Awazu, V. 2003. Knowledge management. *HR Magazine,* November 107-112.

Dube, L & Ngulube, P. 2012. Knowledge sharing in a multicultural environment: challenges and opportunities. *South African journal of library and information science* 78(1):68-77. http://sajlis.journals.ac.za/pub/article/view/48/41 (Accessed 20 October 2013).

De Long, DW & Fahey, L. 2000. Diagnosing cultural barriers to knowledge management. A*cademy of management executive* 14(4): 113-127. http://www.smartworkforcestrategies.com (Accessed 23 May 2014).

Davenport, TH, De Long, DW & Beers, MC. 1998. Successful knowledge management projects. *Sloan management review.* https://www.ischool.utexas.edu/~i385q-dt/readings/Davenport_DeLong-1998-Successful.pdf (Accessed 23 March 2014).

Dorn, E & Sahinyan, A. 2011. *Effects of information and communication technologies on Knowledge Transfer: an employee perspective.* https://gupea.ub.gu.se/bitstream/2077/26737/1/gupea_2077_26737_1.pdf (Accessed 3 July 2014).

Esteves, J & Pastor, J. 2004. Using a multimethod approach to research enterprise systems implementations. *Electronic journal of business research methods* 2 (2):69-82.

Fidel, R. 2008. Are we there yet? Mixed methods research in library and information science. *Library & information science research 30:265-272.* http://faculty.washington.edu/fidelr/RayaPubs/sdarticle.pdf (Accessed 8 April 2014).

Given, LM. 2008*. The sage encyclopedia of qualitative research methods.* http://knowledge.sagepub.com/view/research/n392.xml (Accessed 5 April 2014).

Godwin-Jones, B. 2003. Emerging technologies: wikis and blogs: environment for on-line collaboration. *Journal of language learning and technology* 7(2):12-16. http://llt.msu.edu/vol7num2/emerging/default.html (Accessed 3 July 2014).

Golofshani, N. 2003. Understanding reliability and validity in qualitative research*. Journal of qualitative report 8 (4):597-607.*

Hana, U & Lucie, L. 2011. Staff turnover as a possible threat to knowledge Loss. *Journal of competitiveness* 3:84-98. http://www.cjournal.cz/files/69.pdf

Hart, J. 2013. *Top 100 tools for learning: the results of the 7th annual learning tools survey.* http://c4lpt.co.uk/top100tools/ (Accessed 13 August 2014).

Hassandoust, F. 2012*. Implications knowledge sharing through e-collaboration and communication tools.* http://www.scientificpapers.org/wp-content/files/1137_Knowledge_Sharing_through_E-Collaboration_and_Communication_Tools.pdf (Accessed 3 November 2013). http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/1732.pdf (Accessed 15 June 2014).

Hinton, B. 2003. Knowledge management and communities of practice: an experience from Rabobank Australia and New Zealand. *Journal of international food and agribusiness management review* 5(3):1-15. http://www.sajim.co.za/index.php/SAJIM/article/viewFile/376/365 (Accessed 12 June 2014)

Hjorland, B. 1998. Theory and metatheory of information science: a new interpretation. *Journal of documentation* 54 (5):606-621.

Holbeche, L. 2005. *The high performance organization: creating dynamic stability and sustainable success.* Elsevier: Butterworth.

Hosseini, E & Hashempour, L. 2012. *The status of librarians' knowledge sharing by the usage of web 2.0 tools: A case study of central libraries of Tabriz governmental universities.* http://by2012.bilgiyonetimi.net/proceedings/hosseini_hashempour.pdf (Accessed 9 April 2014).

Hundie, K. 2001. Retrospective conversion of card catalogue at the national university of Lesotho library. *African journal of library, archives & information science 11(2):149-157.* http://0web.b.ebscohost.com.oasis.unisa.ac.za/ehost/pdfviewer/pdfviewer?sid=0acc3d37-7249-4967-a273-c93a93162c0c%40sessionmgr114&vid=4&hid=124 (Accessed 8 May 2014).

Hussein, A. 2009. *The use of triangulation in Social sciences research: can qualitative and quantitative methods be mixed?* http://jcsw.no/local/media/jcsw/docs/jcsw issue_2009_1_8_article.pdf (Accessed 18 April 2015).

Hsu, IC. 2008. Knowledge sharing practices as a facilitating factor for improving organizational performance through human capital: a preliminary test. *Journal of expert systems with applications* 35:1316-1326.

Ikoja-Odongo, R & Mostert, J. 2006. Information seeking behaviour: a conceptual framework. *South African journal of library and information science* 70(3):145-158.

Iqbal, S, Toulson, P & Tweed, D. 2012. *The role of HRM practices as benchmarks in knowledge management: an empirical study.* http://www.worldbusinesscapabilitycongress.com (Accessed 8 2015).

Islam, MZ, Ahmed, SM, Hasan, I & Ahmed, SU. 2011. Organizational culture and knowledge sharing: empirical evidence from service organizations. *African journal of business management* 5(14):5900-5909. http://www.academicjournals.org/ajbm/pdf/pdf2011/18%20July/Islam%20et%20al.pdf (Accessed 12 September 2013).

Ismail, MB & Yusof, ZM. 2010. The impact of individual factors on knowledge sharing quality. *Journal of organizational knowledge management* 2010:1-13.

Jahani, S, Ramayah, T & Effendi, AA. 2011. Is reward system and leadership important in knowledge sharing among academics? *American journal of economics and business administration* 3(1):87-94. thescipub.com/pdf/10.3844/ajebasp.2011.87.94 (Accessed 17 June 2014).

Jantz, R. 2001. Knowledge management in academic libraries: special tools and processes to support information professionals. *Journal of reference service review* 29(1):33-39. (Accessed 5 January 2014).

Javadi, MHM, Zadeh, ND, Zandi, M & Yavarian, J. 2013. Effect of motivation and trust on knowledge sharing and effect of knowledge sharing on employee's performance. *International journal of human resource studies* 2(1):210-221. http://www.macrothink.org/journal/index.php/ijhrs/article/viewFile/1675/1383 (Accessed 17 June 2014).

Jiacheng, W, Lu, L & Francesco, CA. 2010. A cognitive model of intra-organizational knowledge-sharing motivations in the view of cross-culture*. International journal of information management* 30: 220-230. http://sem.buaa.edu.cn/NewsAdmin/eWebEditor/UploadFile/2011415161732123.pdf (Accessed 17 June 2014).

Jick, TD. 1979. Mixing qualitative and quantitative methods: triangulation in action. *Administrative science quarterly* 24(4):602-611.

Jones, K & Leonard, LNK. 2009. *From tacit to organizational knowledge for successful KM*. http://www.uky.edu/~gmswan3/575/From_Tacit_to_OK.pdf (Accessed 15 September 2015).

Johnson, RB & Christensen, LB. 2004. *Educational research: quantitative, qualitative, and mixed approaches*. Boston, MA: Allyn and Bacon.

Johnson, RB, Onwuegbuzie, AJ & Turner, LA. 2007. Towards a definition of mixed methods research. *Journal of mixed methods research 1 (2): 112-133.* https://drupal.coe.unt.edu/sites/default/files/24/59/Johnson,%20Burke%20Mixed%20Methods%20Research.pdf (Accessed 6 May 2014).

Kamal, KJ, Manjit, SS & Gurvinder, K. S. 2007. *Knowledge sharing among academic staff: a case study of business school in klang valley, Malaysia. Research papers.* http://www.ucsi.edu.my/cervie/ijasa/volume2/pdf/08A.pdf. (Accessed 18 July 2014).

Kaymaz, K. 2010. The effects of job rotation practices on motivation: a research on managers in the automotive organizations. *Business and economics research journal* 1(3):69-85.

Keyes, J.2005. *Identifying the barriers to knowledge sharing in knowledge intensive organizations.* http://www.newarttech.com/KnowledgeSharing.pdf (Accessed 27 July 2014).

Kebede, G. 2010. Knowledge management. An information science perspective. *International journal of information management (*30):1416-424.

Kim, S & Lee, H. 2006. The impact of organizational context and information technology jon employee knowledge-sharing capabilities. *Journal of public administration review 66(3)370-385.* http://www.irma-international.org/viewtitle/23855/ (Accessed 20th June 2014).

King, WR & Marks, PV. 2008. Motivating knowledge sharing through a knowledge management system. *International journal of management science (36):131-146*

Kiplang'at, J & Ocholla, DN. 2005. Diffusion of information and communication technologies in communication of agricultural information among agricultural researchers and extension workers in Kenya. *South African journal of library and information science* 71(3):234-246. sajlis.journals.ac.za/pub/article/download/591/539 (Accessed 3 July 2014).

Kothari, CR. 2004. *Research methodology- methods and techniques, 2nd edition.* New Delhi: New Age international.

Kroll, T. & Neri, M. 2009. Designs for mixed methods research. In Andrew, S & Halcomb, EJ. (eds). *Mixed methods research for nursing and the health sciences.* London: Sage Publications.

Kulkarni, M & Deshpande, NJ. 2012. Empowering library users, establishing channel of communication for service quality expectations of trainers from government administrative training institute libraries in India. Paper presented at the 203 conference, India, June. http://conference.ifla.org/past-wlic/2012/203-kulkarni-en.pdf (Accessed 23 May 2014.)

Kumar, R. 2005. *Research methodology: a step-by-step guide for beginners, 2nd ed.* London: Sage Publishers.

Laudon, KC & Laudon, JP. 2007*. Management information systems: managing the digital firm.* 10th ed. New Jersey: Pearson education.

Leedy P & Ormrod, J. 2005. *Research design- practical research, planning and design.* London: Pearson education.

Long, T & Johnson, M. 2000. Rigour, reliability and validity in qualitative research*. Journal* of c*linical effectiveness in nursing 4* (1):30–37*.*

Lyn Grace, TP. 2009. Wikis as a knowledge management tool. *Journal of knowledge management* 13(4):64-74. http://lpis.csd.auth.gr/mtpx/km/material/JKM-13-4b.pdf Accessed 10 August 2014).

Mahmood, I, Ahmad, H & Hussain, CM. 2011. Impact of organizational human capital on organizational performance. *Asian journal business and management sciences* 1(4):22-28.

McDermott, R & O'Dell, C. 2001. Overcoming culture barriers to sharing knowledge. *Journal of knowledge management* 5 (1):76-85.

Mckechnie, LEF & Pettigre, KE. 2002. Surveying the use of theory in Library and Information Science research: a disciplinary perspective. *Library trends journal* 50(3):406-417.

Mahroeian, H & Forozia, A. 2012. Challenges in managing tacit knowledge: a study on difficulties in diffusion of tacit knowledge in organizations: *International journal of Business and Social Science* 3(19):303-308.

Malhotra, Y. 2000. *Knowledge management, knowledge organizations and knowledge worker: a review from the frontlines.* www.brint.com/interview/maeil.htm (Accessed 6 January 2014).

Malinski, RM. 2002. Job rotation in an academic library: damned if you do and damned if you don't. *Library trends* 50(4): 673-680. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.167.653&rep=rep1&type=pdf (Accessed 7 November 2013).

Maponya, P. 2004. *Knowledge management practices in academic libraries: a case study of the University of Natal, Pietermaritzburg libraries.* http://mapule276883.pbworks.com/f/Knowledge+management+practices+in+academic+libraries.pdf (Accessed 12 September 2013).

Maree, K. 2007. *First steps in research*. Pretoria: Van Schaik.

Mariti, LM.2006. An evaluation of information literacy standards of postgraguate students of NUL. Master's thesis, University of Botswana, Botswana.

Martins, EC & Martins, N. 2011. The role of organizational factors in combating tacit knowledge loss in organizations. *Southern African business review* 15(1):49-69. http://www.ajol.info/index.php/sabr/article/viewFile/76392/66850 (Accessed 6 January 2014).

Mavodza, J. 2010. Knowledge management practices and the role of an academic library in a changing information environment: the case of the metropolitan college of New York, PhD thesis, University of South Africa. http://uir.unisa.ac.za/bitstream/handle/10500/3945/thesis_mavodza_j.pdf?...1

Mavodza, J & Ngulube, P. 2011. Exploring the use of knowledge management practices in an academic library in a changing information environment. *South African journal of library & information science* 77(1):15-25. sajlis.journals.ac.za (Accessed 12 August 2013).

Meetoo, D & Temple, B. 2003. Issues in multi-method research: constructing self-care. *International journal of qualitative methods* 2(3):1-21.

Mertens, DM. 2010. *Research and evaluation in Education and Psychology: integrating diversity with quantitative, qualitative and mixed methods.* 3rd ed. California: Sage publication.

Mouton, J.1996. *Understanding social research*. Pretoria: Van Schaik.

Mphidi, H.2007. *The utilization of an intranet as a knowledge management tool in academic libraries*.
http://repository.up.ac.za/bitstream/handle/2263/3131/Mphidi_Utilisation(2004).pdf?=1 (Accessed 4 September 2013).

Mphindiwa, L. 2010. Impact of Intranet as a knowledge sharing tool: experiences of ZIMRA. Knowledge management, continuing professional development and workplace learning with information technology. Paper presented at 107 conference, Sweden, August.
http://conference.ifla.org/past-wlic/2010/107-mpindiwa-en.pdf (Accessed 19 July 2014).

Naikal, A & Paloti, R. 2005. *Knowledge sharing: a key for KM success.*
www.researchgate.net (Accessed 19 June 2014).

Neuman, WL. 2000. *Social research methods: qualitative and quantitative approaches*. 4th edition. Boston: Allyn and Bacon.

Nesheim, T & Gressgard, LJ. 2014. Knowledge sharing in a complex organization: antecedents and safety effects*. Journal of safety science 62(62):28-36.*

Ngulube, P. 2005. Improving the quality of research outputs in higher education through knowledge sharing and collaboration: a case study. *Mousaion*, 23(1):39-61.

Ngulube, P, Mokwatlo, K & Ndwandwe, S. 2009. Utilisation and prevalence of mixed methods research in Library and Information research in South Africa 2002-2008: *South African journal of library and information science* 75(2):105-116.

Noe, RA, Colquitt, JA, Simmering, MJ & Alvarez, SA. 2003. Knowledge management: developing intellectual and social capital. In Jackson, SE, Hitt, MA & Denisi, AS. (eds) *Managing knowledge for sustained competitive advantage*. San Francisco, CA: Jossey-Bass.

Nonaka, I. 1994. *A dynamic theory of organizational knowledge creation.*
http://fagbokforlaget.no/boker/downloadpsykorg/KAP6/artikler/Nonakas%20kunnskapsteori.pdf (Accessed 8 November 2014).

Nonaka, I & Takeuchi, H. 1995. *The Knowledge-creating company: how Japanese companies create the dynamics of innovation*. Oxford University Press: New York.

Nonaka, I & Toyama, R. 2003. The knowledge-creating theory revisited: knowledge creation as a synthesizing process: *knowledge management research and practice* 1:1-10.

Nonaka, I & Konno, N. 1998. The concept of "ba": building a foundation for knowledge creation. *California management review* 40(3):40-52.

Nulty, DD. 2008. The adequacy of response rates to online and paper surveys: what can be done. *Journal of assessment & evaluation in higher education 33(3):301-314.*

Okonedo, S & Popoola, SO. 2012. Effect of self-concept, knowledge sharing and utilization on research productivity among librarians in public universities in South-west, Nigeria. *Library philosophy and practice (e-journal)* 11(2):1-22. http://0web.ebscohost.com.oasis.unisa.ac.za/ehost/pdfviewer/pdfviewer?sid=cd8967e8-15c3-4363-95bf-4f23e08a5ed7%40sessionmgr104&vid=7&hid=120 (Accessed 1 October 2013).

Oliver, S & Kandadi, KR. 2006. How to develop knowledge culture in organizations. A multiple case study of large distributed organization. *Journal of knowledge management* 10 (4):6-24.

Olsen, W. 2004. *Developments in Sociology*. Ormskirk: Causeway press.

Olsen, W. 2004. *Triangulation in social research: qualitative and quantitative methods can really be mixed.* http://research.apc.org/images/5/54/Triangulation.pdf (Accessed 18 April 2015).

Parahoo K. 2006. *Nursing research, principles, process and issues.* 2nd ed. Palgrave: Houndsmill.

Parirokh, M.2008. How implementation of knowledge management can make a difference in Libraries: a case study of KM practice in astan quds library organization. (Unpublished). http://profdoc.um.ac.ir/articles/a/1004947.pdf (Accessed 19 June 2014).

Peariasamy, T & Mansor NNA. 2008. *On-the-job knowledge sharing: how to train employees to share knowledge.* http://eprints.utm.my/8706/1/TPeariasamy2008-On-The-Job_Knowledge_Sharing.pdf (Accessed 21 September 2014).

Peterson, D. 2012. Knowledge retention strategies in selected Southern Africa public broadcasting corporations, PhD thesis, University of Fort Hare. http://ufh.netd.ac.za/bitstream/10353/438/1/PetersonDewah%20PhD%20thesis.pdf (Accessed 20 June 2014.)

Pettigrew, KE & McKechnie, LEF. 2001. The use of theory in information science research. *Journal of the American society for information science and technology 52(1):62-73.*

Polanyi, M. 1966. *The tacit dimension.* London: Routledge.

Punch, K. 2009. *Introduction to research methods in education.* LA: Sage Publishers.

Rajurkur, M. 2011. Knowledge management in academic libraries. *International journal of parallel and distributed system* 2(11): 321-323. http://www.indusedu.org/IJRMEC/November2012 (pdf)/22.pdf

(Accessed 21 May 2013).

Ramirez, A. 2007. To blog or not blog: understanding and overcoming the challenge of knowledge sharing. *Journal of knowledge management practice* 8(1):1-17.

Randolph, JJ. 2009. A guide to writing the dissertation literature review: *practical assessment, research & evaluation 14(13):1-13.*
http://pareonline.net/pdf/v14n13.pdf
(Accessed 12 May 2014).

Riege, A. 2005. Three-dozen knowledge-sharing barriers managers must consider. Journal *of knowledge management* 9(3):18-35.
http://zainal13ek.blogstudent.mb.ipb.ac.id/files/2014/01/9-Three-dozen-knowledge-sharing-barriers.pdf (Accessed 27 July 2014).

Ritchie, J & Lewis, J. (eds) 2003. *Qualitative research practice: a guide for social science students and researchers.* London: Sage publications.

Russell, CL & Cynthia, L. 2005. *An overview of the integrative research review.*
http://www.nitiphong.com/paper_pdf
(Accessed 23rd May 2014).

Sahasrabudhe, V. 2001. Information technology in support of knowledge management. In Srikantaiah, TD & Koenig, MED. (eds). *Knowledge management for information professionals.* ASIS Monograph Series, Medford, New Jersey: Information today Inc: 269-276.

Sanchez, R. 2004. "*Tacit knowledge" versus "Explicit knowledge" approaches to knowledge management practices*.
http://research.fraserhealth.ca/media/Tacit-vs-Explicit%20Knowledge%20Transfer.pdf
(Accessed 28th June 2014).

Sarrafzadeh, M. 2005. The implications of knowledge management for the library and information profession. A*ctKM online of knowledge management* 2(1):91-102.
http://researchbank.rmit.edu.au/view/rmit:13384 (Accessed 14 August 2013).

Shanhong, T. 2000. Knowledge management in libraries in the 21st century, 66th IFLA council and general conference, Jerusalem, Israel.
http://ifla.inist.fr/IV/ifla66/papers/057-110e.htm (Accessed 5 January 2014).

Simmonds, PL & Andaleeb, SS. 2001. Usage of academic libraries: the role of service quality, resources and user characteristics. *Journal of library trends 49(4):626-634.*
https://www.ideals.illinois.edu/bitstream/handle/2142/8368/librarytrendsv49i4f_opt.pdf?sequence=1 (Accessed 23 May 2014).

Singleton, JR. 1993. *Approaches to social research.* 2nd ed. New York: Oxford university press.

Skok, W & Kalmanovitch, C. 2005. Evaluating the role and effectiveness of an intranet in facilitating knowledge management: a case study at Surrey County Council. *Journal of information and management* 42:731-744. http://www2.warwick.ac.uk/fac/soc/wbs/conf/olkc/archive/oklc3/id261.pdf (Accessed 20 July 2014).

Smith, HA & Mckeen JD. 2009. *Instilling a knowledge sharing culture*. http://apollon1.alba.edu.gr/oklc2002/proceedings/pdf_files/id25.pdf (Accessed 11 September 2013)

Sole, D. 2002. *Sharing knowledge through storytelling*. http://www.providersedge.com/docs/km (Accessed 7 November 2013).

Squire, MM & Snyman, R. 2004. *Knowledge management in three financial organization: A case study.* http://repository.up.ac.za/bitstream/handle/2263/3098/Squier_Knowledge%282004%29.pdf?sequence=1 (Accessed 18 April 2015).

Stafford, C & Mearns, MA. 2009. *What happens when organizations embrace social networking? Knowledge at a multinational business solutions corporation*. www.sajim.co.za/ (Accessed 21st June).

Standing, H. 2004. *Understanding the 'demand side' in service delivery.* http://hdrc.dfid.gov.uk/wp-content/uploads/2012/10/Understanding-the-demand-side-in-service-delivery.pdf (Accessed 1 October 2013).

Stover, M. 2004. Making tacit knowledge explicit: the ready reference database as codified knowledge. *Reference services review* 32(2):164-173.

Tagliaventi, MR. & Mattarelli, E. 2006. The role of networks of practice, value sharing and operational proximity in knowledge flows between professional groups. *Journal of human relations* 59(3): 291-319. http://hum.sagepub.com/content/59/3/291 (Accessed 20 June 2014).

Tan Nya Ling, C. 2011. Culture and trust in fostering knowledge. *Electronic journal of knowledge management* 9(4): 328-339. www.ejkm.com (Accessed 11 September 2013).

Taole, N. 2008. Evaluation of the innopac library system in selected consortia and libraries in the Southern African region: implications for the Lesotho library consortium, PhD thesis, University of Pretoria. http://repository.up.ac.za/bitstream/handle/2263/23861/Complete.pdf?sequence=7 (Accessed 12 May 2014).

Tayie, S. 2005. *Research methods and writing research proposals.* Cairo: CAPSCU.

Taylor, D & Procter, M. 2005. *The literature review: a few tips on conducting it.* http://www.writing.utoronto.ca/images/stories/Documents/literature-review.pdf (Accessed 23 May 2014).

Taylor, H. 2007. Tacit knowledge: conceptualizations and operationalizations. *Journal of knowledge management 3(3):60-73.* http://biblio.uabcs.mx/html/libros/pdf/15/3.pdf (Accessed 25 June 2014).

Townely, CT. 2001.*Knowledge management and academic libraries.* http://crl.acrl.org/content/62/1/44.full.pdf (Accessed 21 June 2014).

UNISA policy on research ethics (2007). http://cm.unisa.ac.za/contents/departments/res_policies/docs/ResearchEthicsPolicy_apprvCounc_21Sept07.pdf (Accessed 3 November 2013).

Uriarte, FA. 2008. *Introduction to knowledge management: a brief introduction to the basic elements of knowledge management for non-practitioners interested in understanding the subject.* http://www.aseanfoundation.org/documents/knowledge_management_book.pdf (Accessed 1 October 2013).

Van de Berg, H & Snyman, MMM. 2003. Managing tacit knowledge in the corporate environment: communities of practice. *South Africa journal of information management* 5(4):1-11. http://www.sajim.co.za/index.php/SAJIM/article/viewFile/376/365 (Accessed 20 June 2014).

Van der Walt, C, Van Brakel, PA & Kok, J.A. 2004. Knowledge sharing via enterprise intranets –asking the right questions. *South African journal of information management* 6(2): 1-19. www.sajim.co.za/index.php/SAJIM/article/download/389/37 (Accessed 20 July 2014).

Walter, C, Ribiere, V & Galipeau, D. 2013. Evaluating the effect of rewards on the level of participation in communities of practice at UNDP. *Journal of BU academic review* 12(1):1-20. http://www.bu.ac.th/knowledgecenter/epaper/jan_june2013/pdf/ac01.pdf (Accessed 17 June 2014).

Wang, S & Noe, RA. 2010. Knowledge sharing: a review and directions for future research. *Human resource management review* 20 (4): 115-131. http://www.ucdenver.edu/academics/colleges/CLAS/Centers/writing/Documents/HR_Managament.pdf (Accessed 12 September 2013).

Wang, C. 2004. The influence of ethical and self-interest concerns on knowledge sharing intentions among managers: an empirical study. *International journal of management,* 21(3):370-381.

Wen, S. 2005. *Implementing knowledge management in academic libraries: a pragmatic approach.*
 http://www.white-clouds.com/iclc/cliej/cl19wen.htm (Accessed 12 March 2015).

World Meteorological Organization (2012). Organizational strategy for service delivery.
http://www.wmo.int/pages/prog/amp/pwsp/documents/SDS.pdf
(Accessed 24 June 2014).

Yeasmin, S & Rahman, KF. 2012. Triangulation research methods as tool of social science research: *BUP journal* 1(1):154-163.

Appendix A: Request letter to conduct research at TML

<div align="right">
PO Box 15379
Maseru 100
 Lesotho

24 June 2015
</div>

The registrar
National University of Lesotho
PO Box 180
Roma
Maseru
100

Cc: NUL Librarian

Dear Sir/Madam

<div align="center">

REQUEST APPROVAL TO CONDUCT A RESEARCH AT THE NATIONAL UNIVERSITY OF LESOTHO's THOMAS MOFOLO LIBRARY

</div>

The above subject matter refers.

I am currently studying towards a Master's degree with the University of South Africa in the field of Information Science. My research topic is **IMPROVING SERVICE DELIVERY AT THE NATIONAL UNIVERSITY OF LESOTHO LIBRARY THROUGH KNOWLEDGE SHARING.** I, therefore, wish to request your permission to administer a research questionnaire to all the library staff. I also request your permission to interview some senior staff members of the library. Please note that this study has been cleared ethically and the recommendation is attached.

Your consideration in this regard would be highly appreciated.

_____
Mr. Tahleho Emmanuel Tseole
M.INF student
+266 58729105

Appendix B: Approval to conduct research

M.INF Student (UNISA)
P O Box 15379
Maseru 100
Lesotho

Dear Mr. Tseole,

RE: REQUEST FOR APPROVAL TO CONDUCT A RESEARCH AT THE NATIONAL UNIVERSITY OF
        LESOTHO THOMAS MOFOLO LIBRARY

We received your letter regarding the above-captioned subject.

On behalf of the Library service, I wish to advise that you are granted permission to conduct research within the Library where you may liaise with the Head of Client Access and Extension Services, Ms. M Lephoto.

She will be our contact and direct you as appropriate where need arises.

Yours sincerely,
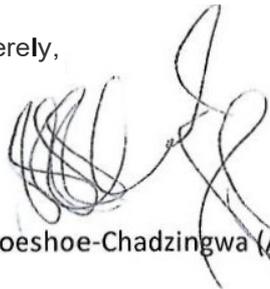
MM Moshoeshoe-Chadzingwa (Assoc. Prof.)

CC: Head - Client Access Services
        HODs - library

Appendix B: Ethical clearance Letter

Department of Information Science

College of Human Sciences

Date: 31st January 2015

Proposed title: Improving service delivery at the National University of Lesotho Library through knowledge management

Principal investigator: Tŝeole Tahleho

Student number: 46745807

Reviewed and processed as: Class approval (see paragraph 10.7 of the UNISA. Guidelines for Ethics Review)

Approval status recommended by reviewers: Approved

The Research Ethics Committee of the Department of Information Science in the College of Human Sciences at the University of South Africa has reviewed the proposal and considers the methodological, technical and ethical aspects of the proposal to be appropriate to the tasks proposed. Approval is hereby granted for Mr Tahleho Tŝeole (46745807) to proceed with the study in strict accordance with the approved proposal and the ethics policy of the University of South Africa.

In addition, the candidate should heed the following guidelines:
- To only start this research study after obtaining informed consent from the interviewees
- To carry out the research according to good research practice and in an ethical manner
- To maintain the confidentiality of all data collected from or about research participants, and maintain security procedures for the protection of privacy
- To notify the committee in writing immediately if any adverse event occurs.

Kind regards

Mr SC Ndwandwe
Chair: Research   Ethics   Committee
Department of Information Science

Appendix C: Informed Consent

<p align="center">PARTICIPANT INFORMATION SHEET</p>

Date: 9 July 2015

Title: Improving Service Delivery at the National University of Lesotho Library through Knowledge Sharing

Dear Prospective Participant

My name is Tahleho Tšeole and I am doing research with Patrick Ngulube, a professor in the Department of Information Science towards an MA degree at the University of South Africa. We are inviting you to participate in a study entitled **Improving service delivery at the National University of Lesotho Library through knowledge sharing.**

PURPOSE OF THE STUDY

I am conducting this research to find out if the existing knowledge is being effectively disseminated and shared among the librarians of Thomas Mofolo Library (TML).

WHY AM I BEING INVITED TO PARTICIPATE?

Please note that given the nature of this study, all the library staff, both professional and para-professional, have been selected to participate in this study and permission to conduct this study has been granted by the university.

NATURE OF PARTICIPATION IN THIS STUDY

The study involves questionnaires and semi-structured interviews. Indicate. You are, therefore, expected to have a week within which to complete the questionnaire and the interview will be conducted with the selected few chosen by way of purposive sampling.

<p align="center">136</p>

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. Should you decide to take part, you will be given this information sheet to keep and you will be asked to sign a written consent form. Because this questionnaire does not indicate your identity, please note that it will not be possible to withdraw once they have submitted the questionnaire.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

The main benefit resulting from this study is that its results, when shared by librarians, may assist them to improve their skills, share knowledge and, consequently, improve service delivery. The research report of this study will also inform further studies on knowledge sharing.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

There are currently no foreseeable negative consequences for participating in this study.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

Please note that your name will not be recorded and no one apart from the researcher and the identified members of the research team will know your involvement in this research. Also note that your answers will be given a code number or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings. Apart from this thesis, please be aware that your anonymous data may be used for other purposes, such as a research report, journal articles and/or conference proceedings.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be scanned and stored by the researcher in an electronic format for a period of five years in a password-protected computer. The scanned copies will be destroyed by way of shredding. Future use of the stored data will be subject to further Research Ethics Review and approval, if applicable.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

Your participation in this research is wholly out of goodwill and no incentive will be provided.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the Department of Information Science, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact **Tšeole Tahleho** on **58729105**. The findings are accessible for a period of six months. Should you require any further information or want to contact the researcher about any aspect of this study, please contact the researcher at **tahleho.tseole@gmail.com.**

Should you have concerns about the way in which the research has been conducted, you may contact **Professor Ngulube**, my supervisor, at +27 12 429 2832 or ngulup@unisa.ac.za. Alternatively, contact the research ethics chairperson of the Department of Information Science, Mr Sipho Ndwandwe, on +277 12429 6037 or ndwansc@unisa.ac.za.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

_____
        TAHLEHO TŠEOLE

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____, confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the interview.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname ……………………………………………………

Participant Signature…………………………………………..Date…………………..

Researcher's Name & Surname   Tahleho Tšeole

Researcher's signature…………………………………………..Date………………………

Appendix D: Study questionnaire

COVERING LETTER FOR THE QUESTIONNAIRE FOR COLLECTING DATA ON
IMPROVING SERVICE DELIVERY AT THE NATIONAL UNIVERSITY OF LESOTHO
LIBRARY THROUGH KNOWLEDGE SHARING

P.O. Box 15379
Maseru, 100
Lesotho

Dear participant

My name is Tahleho Tšeole, a Master's student in the Department of Information Science at the University of South Africa. I am conducting a research study in partial fulfillment of the requirements of a Master's degree in Information Science titled "**Improving service delivery at the National University of Lesotho through knowledge sharing**". The study has the following objectives:

- To determine the understanding of knowledge sharing at TML
- To identify knowledge sharing practices at TML
- To identify tools for sharing knowledge
- To identify the critical success factors of knowledge sharing
- To identify knowledge sharing obstacles
- To make recommendations

Please be assured that your views on this study will not be used for any purpose other than those advanced by this study. The study has been accorded ethical clearance by the Department of Information Science at the University of South Africa. As a library staff member, your participation is voluntary and you are assured that information you provide will be treated confidentially. Please be honest in your input. Thank you for your time and participation in this study.

Yours Sincerely

Tahleho Emmanuel Tšeole

University of South Africa
Department of Information Science
SA
Mobile: +266 58729105

IMPROVING SERVICE DELIVERY AT THE NATIONAL UNIVERSITY OF LESOTHO LIBRARY THROUGH KNOWLEDGE SHARING QUESTIONNAIRE

SECTION A: Demographic details

Please write your answers to the spaces provided.

1. a) Position……………………………………………………………

b) Gender……………………………………………………………

c) Experience……………………………………………………………

d) Education, please choose the highest.

[   ] Certificate in Library and Information Science (LIS)

[   ] Diploma in LIS

[   ] Postgraduate diploma in LIS

[   ] Degree in LIS

[   ] Master in Library

[   ] PhD in LIS

[   ] Other (please indicate)…………………………………

g) Please indicate your age range by ticking in appropriate box below.

Below 25	
25-35	
35-46	
46-57	
57-65	
Above 65	

Section B: Knowledge sharing

2. What is your general opinion about knowledge sharing?

[   ] Have never heard of it

[   ] Important to service delivery

[   ] Provides advantage to organizations

[   ] Other (please specify) ……………………………………………………

3. In your opinion, do you think knowledge sharing may help other TML staff to solve problems? (Please tick in the box)

Yes [   ]   No [   ]

4. If your answer to the question above was yes, please explain how.

_____

_____

_____

5. Is knowledge sharing structured or formalized in some way at TML?

Yes [   ]   No [   ] (Please tick in the box)

6. How would you define the position of KM in institution/ library? (please tick in the box)

[   ] The institution library has a KM policy / strategy

[   ] KM is practiced in an ad hoc manner

[   ] KM is not practiced

[   ] The library has a system in place for retaining knowledge from experienced staff

7. Please state the extent to which you agree to the statement below.

Statement	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
There is a sharing of perceptions and opinions about work issues among colleagues					

8. Does your library have an intranet?

Yes [   ]   No [   ]

9. If your answer is yes to question 8 above, what type of content is uploaded on it?

----

10. Has anyone resigned at TML in the last five years? (Please tick in the box)

Yes [ ]   No [ ]

11. If your answer to the question above is yes, were they ever interviewed before to retain their knowledge? (Please tick in the box)

Yes [ ]   No [ ]

Section C: Knowledge sharing tools (technology based)

12. Information technology enables connections that facilitate knowledge sharing in an organization. Do you perceive yourself as computer literate?

Yes	
No	

13. Does your library have internet connection?

Yes [ ]   No [ ]

14. If your answer is yes to question 13 above, please state if it is accessible to everyone in the library?

Yes	
No	

15. Which one of the following technologies do you use in your library?

(Please tick in the box)

Internet	
Intranet	
E-mail	

Videoconferencing	
Wikis	
LinkedIn	
Facebook	
Blog	

Section D: Knowledge sharing tools (human-based)

16. Which one of the following activities is used for sharing knowledge at TML?

Communities of Practice (CoPs)	
Mentorship	
Job rotation	
Storytelling	
Job shadowing	

17. How far do you agree with the following statements?

	Statement	Agree	Strongly agree	Not sure	Disagree	Strongly disagree
	Whenever new employees are hired at TML, they are allocated a mentor					
	Have any of the resigned employees ever been recalled to assist with library activities because no one in the library knew how to do it?					
	Have any of the retired employees ever been recalled to assist with library activities because no one in the library knew how to do it?					
	Do you belong to a formal grouping in the library where you share work					

related activities?					
Are TML librarians usually rotated in various department such as cataloguing, technical services, etc.?					
Do librarians at TML share knowledge by way of blogging?					
Do librarians at TML share knowledge by way of Facebook?					

Section E: Knowledge sharing practices

18. As far as you are concerned, which of the following knowledge sharing practices exist at TML? (Please tick where appropriate).

Training and development	
Lesson learned	
Action learning	
Rewards	
Openness	
Trust	
Other, please specify	

19. Does a knowledge sharing culture exist at TML? (Please tick in the box)
    Yes [ ]   No   [ ]

20. Please state the extent to which you agree to the following statements.

Statement	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
There are activities necessary for sharing knowledge such as brainstorming sessions, workshops, meetings, etc.					

21. Please state the extent to which you agree to the statements below.

Statement	Strongly agree	agree	Not sure	Disagree	Strongly disagree
The TML organisational structure allows for ease of knowledge sharing					
The library provides incentives to encourage knowledge sharing					

Section F: Knowledge sharing obstacles

22. Which one of the following, according to you, impedes knowledge sharing at TML? (Please tick where appropriate).

Knowledge is power mentality	
Age difference	
Difference in experience	
Difference in qualifications	
Lack of trust	
Lack of rewards	
Lack of participation	
Other, please specify	

23. In which way does TML management not support knowledge sharing?

[   ] Platform for sharing knowledge
[   ] Rewards
[   ] Communication
[   ] Other, please specify _____

Section G: Critical success factors of knowledge sharing

24. What rewards or incentives, if any, are there to encourage knowledge sharing at TML? (Please tick as many as may apply)

Promotion	
Pay rise	
A day off	
Monetary rewards	
Any other (specify)	

25. Which of the following and any other motivations do you consider as reasons for sharing knowledge at TML?

To be rewarded	
To conduct training	
To enhance service	
To increase productivity	
Other (please specify)	

APPENDIX E: INTERVIEW GUIDE

INTERVIEW GUIDE IMPROVING SERVICE DELIVERY AT THE NATIONAL

UNIVERSITY OF LESOTHO LIBRARY THROUGH KNOWLEDGE SHARING

<div align="right">

P.O. Box 15379
Maseru, 100
Lesotho

</div>

Introduction

My name is Tahleho Tšeole. I am conducting a research for my Master's dissertation at the University of South Africa (UNISA) and my topic is **Improving Service Delivery at the National University of Lesotho Library through Knowledge Sharing.** You have been selected to participate in this study through a purposive sampling.

The study has the following objectives:

- To determine the understanding of knowledge sharing at TML
- To identify knowledge sharing practices at TML
- To identify tools for sharing knowledge
- To identify the critical success factors of knowledge sharing
- To identify knowledge sharing obstacles
- To make recommendations

Please be assured that your views on this study will not be used for any purpose other than those advanced by this study. As a librarian, your participation is voluntary and you are assured that information you provide will be treated confidentially. Please be honest in your input. Thank you for your time and participation in this study.

Yours Sincerely

Tahleho Emmanuel Tšeole
University of South Africa
Department of Information Science
SA
Mobile: +266 58729105

Questions

1. How does TML ensure that knowledge that is gained by staff from seminars or conferences that are held externally is shared among colleagues?

2. How does TML ensure that knowledge that is embedded in people's minds is not lost when they either resign or retire?

3. Does TML have a system for documenting the problems solved?

4. According to the questionnaire, knowledge sharing happens in an ad hoc manner, important as it is. Why is knowledge sharing not formalized?

5. Have any of the resigned employees ever been recalled to assist with library activities because no one in the library knew how to do it?