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KNOWLEDGE SHARING PRACTICES WITHIN AN ORGANISATION'S
INFORMATION SERVICES DIVISION

by

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MINOR DISSERTATION

Submitted in partial fulfilment of the requirements for the degree

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FACULTY OF MANAGEMENT

at the

UNIVERSITY OF JOHANNESBURG

Supervisor: MS A. POTGIETER

OCTOBER 2016
DECLARATION

I certify that the minor dissertation/dissertation/thesis submitted by me for the degree Master's of Commerce (Knowledge Management) at the University of Johannesburg is my independent work and has not been submitted by me for a degree at another university.

_______________________________
(Name in block letters – no signature)
ACKNOWLEDGEMENTS

First and foremost, I would like to thank my God, without whom I would not have succeeded in my studies, I want to thank Him for the following people who were a blessing to me:

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The grace of the Lord Jesus Christ, and the love of God, and the communion of the Holy Ghost, be with you all.
ABSTRACT

Advances in technology and the changing demands of library clients have brought about a demand for innovative, higher quality services from academic libraries. Academic libraries find themselves in a position where they have to either re-evaluate their service models to meet the technologically influenced needs of the library clients, or face redundancy. Research has proven that the practice and implementation of knowledge management (KM) aids an organisation in gaining a competitive advantage, which is at the pinnacle of ensuring that an organisation remains a preferred service provider. In order to address these issues, this research focused on exploring the knowledge sharing (KS) practices of employees within the Library and Information Services (LIS) division at a higher education institution.

The researcher employed a qualitative research design, guided by a case-study research strategy. Semi-structured interviews were conducted, with seventeen respondents who were purposively selected for the sample. Data was analysed using thematic analysis, creating categories of subjects relating to the identified research questions.

The findings of the study revealed that KS was limited within the LIS and mostly occurred informally between employees within the same section. Furthermore, it was found that the culture at LIS was not conducive for the advancement of KS, as respondents felt unsupported by the LIS' management in terms of KS endeavours. A silo culture, encouraging the creation of specialists in specific roles, was identified as a barrier to potential KS practices within the LIS.

In terms of encouraging KS within the LIS, the findings showed that respondents were most enthusiastic about the concepts of rewards and incentives. A need for a formalised KM strategy and consequent policies guiding the acquisition and implementation of KS tools and mechanisms, was also identified.

Recommendations arising from the study included:

1. A need for renewed commitment by LIS management in terms of encouraging a KS culture.
2. A drive to find affordable technologies that would enable the storage, retrieval and sharing of knowledge within the LIS, to ensure that the right knowledge reaches the right person, employee or client, at the right time.
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<tr>
<td>CoP</td>
<td>Community of Practice</td>
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<tr>
<td>CSIR</td>
<td>Council for Scientific and Industrial Research</td>
</tr>
<tr>
<td>DHASA</td>
<td>Digital Humanities Association of Southern Africa</td>
</tr>
<tr>
<td>DVC</td>
<td>Deputy Vice Chancellor</td>
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<tr>
<td>ERP</td>
<td>Enterprise Resource Plan</td>
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<td>HoD</td>
<td>Head of Department</td>
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<td>ICT</td>
<td>Information Communication Technology</td>
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<td>Information Sharing Sessions</td>
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<td>LIS</td>
<td>Library and Information Service</td>
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<td>LMC</td>
<td>Library Management Committee</td>
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<td>LMS</td>
<td>Library Management Systems</td>
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<td>MOOCs</td>
<td>Massive Online Open Courses</td>
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<td>OAP</td>
<td>Open Access Publishing</td>
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<td>SAOUG</td>
<td>Southern African Online User Group</td>
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CHAPTER 1

INTRODUCTION

1.1. Background and rationale

Traditionally, the main function of academic libraries was to collect, process and disseminate information for and among general university stakeholders. The main aim of academic libraries is to support the teaching, learning and research of the university for which it is established (Foo, Chaudhry, Majid & Logan, 2002). Foo et al. (2002) also state that the role of academic libraries is to be efficient, thus giving the particular university a competitive advantage.

Conventionally, academic libraries had no competitors as they were the sole source of information within the universities. However, advances in technology and the rise in the use of social media is reshaping the needs and the expectations of library clients and consequently the library's relevance has been questioned (Husain & Nazim, 2015:137). According to Hendrix (2010), for academic libraries to remain relevant, the library must evaluate its role in a world that is increasingly lived online. Moreover, Hendrix (2010) also argues that the increased time spent online brings about new advances and new ideas, which also drives change within academic libraries. A survey on tertiary students' access to mobile devices shows that students have sound technological knowledge, are technologically literate and that most students have access to all sorts of devices such as smart phones, iPads, tablets and laptops, to mention only a few (Chen & Denoyelles, 2013). These technological developments have contributed to some of the contemporary challenges faced by academic libraries.

Miller (2006) states that these advances have brought about changes in how people communicate and how they acquire and share knowledge and by this virtue, these advances therefore impact on academic libraries, their services, and personnel. Libraries and Librarians therefore need to be effective and efficient to remain relevant, by allowing their clients' (students, staff and external members) needs to be the drivers of change in the dissemination of information (Hendrix, 2010). In addition to this, Shoroma (2015) elaborates that academic libraries need to be innovative in delivering their resources and services to their clients. Innovation in library services is seen as the only way libraries can meet the needs of their clients, which are influenced by rapid advancement in Information Communication Technology (ICT) and the emergence of social media (Hendrix, 2010). This study focused on the knowledge sharing (KS)
practices at one particular library of an institution of higher learning's Library and Information Services (LIS). This library is located in Vanderbijlpark, in the Gauteng province of South Africa. The institution has four campuses, each with its own library. The main library is located in Vanderbijlpark, in the Gauteng province of South Africa, the other three campuses are the Secunda (Mpumalanga Province), Daveyton (Gauteng) and Upington (Northern Cape) campus. Each library has its own campus librarian and library assistants reporting directly to the HoD Clients’ services.

The premise of the study is based on the grounds that academic libraries have been put under pressure due to changes in clients' needs (Mayekiso, 2013:33; Maponya, 2004:11). In the past, academic libraries were the bloodline of institutions, being the sole source of information on campus. As mentioned, advances in technology have created challenges for libraries, which include changes in service patterns from the traditional to digital services, the fast changing students' needs and behaviour, and increased demands for new types of services, including library services which are accessible twenty-four hours a day, seven days a week (Islam, Agarwal & Ikeda, 2015:637). Due to changes in preferences by library clients, it is crucial for libraries to adapt through the use of knowledge management (KM) practices to pursue innovative library services (Anna, Nove & Puspitasari, 2013:3).

The LIS is the university's information and knowledge hub giving clients access to various information resources such as books, journals, newspapers, reference materials, theses and dissertations, government publications, e-books, audio-visual material, online databases and electronic journals, in support of the university's vision for learning, teaching, and research (VUTb, 2013). The university regards the LIS as a strategic asset of the university, which aims to "contribute to the creation of knowledge and the development of lifelong learning" (VUTa, 2013).

Over the years, the library landscape has changed, due to technological advances that gave rise to a demand for better services, such as library clients wanting access to material from the comfort of their homes (Husain & Nazim, 2015:140). To this end, the LIS created a library email address and social media pages on Twitter and Facebook. The LIS also subscribed to online services such as the Ask-a-Librarian service, which is a live, online reference service tool that allows library clients to remotely submit references and research queries to their relevant Information Librarians.

Furthermore, the LIS has equipped Information Librarians with mobile ICT tools such as laptops and tablets to enable them to visit faculties and departments, visit student
clubs and make presentations anywhere, according to the client's preference. In addition, the LIS has also adopted an embedded librarianship program, which sought to make the Librarians present where their clients are, in other words, visible librarianship. However, considering that the LIS' different branches are located in various location across South Africa, the adoption of these tools and strategies does not guarantee that KS is taking place between LIS staff members.

Anna et al. (2013:2) state that "KS is strongly associated with KM" and according to Mueller (2015:55) and Botha (2007:34), KS is vital for the survival of the organisation, as it involves converting tacit knowledge into explicit knowledge, and sharing it among personnel. Maponya (2004:16) stated that library personnel possess tacit knowledge which, according to Rusly, Sun and Corner (2014:692), is not always shared readily among experienced professionals. The LIS recently had to rehire two Librarians, who had left the library, as they possessed skills identified as scarce within the LIS. Thus, through KS, the LIS could retain knowledge within the library, ensuring advanced client service (Anna et al., 2013:2). Shared knowledge is what creates a competitive position and through KS, the LIS will be able to meet their clients' changing needs (Mavodza & Ngulube, 2012).

Furthermore, the implementation of KS in LIS will lead to the improvement in the quality of services offered to the users as noted by Anna and Puspitasari (2013:6); an enhancement of KS practices will also promote communication among colleagues, equipping LIS staff to more effectively solve problems that may occur. Quoting Peter Senge (2010), Anna and Puspitasari (2013:6) further explains that KS opens channels of collaboration, which increases colleagues' willingness to work together, which has the potential to demolish organisational silos.

Evidently KS is mutually beneficial to the sharer and the recipient of knowledge as it boosts confidence and reinforces bonds and connections amongst staff members. Mayekiso (2013:93) attests to this in research focused on KS practices at UNISA. It was discovered that KS leads to better service delivery, since KS promotes communication among colleagues, which results in more informed staff members. Furthermore, it is noted that increased KS will also eliminate the duplication of tasks, and enhance the LIS' work flow processes. This will serve as a foundation for problem solving and the enhancement of decision making processes, improving customer service satisfaction (Awodoyin, Osisanwo, Adetoro & Adeyemo, 2016:13).
Mayekiso (2013:94) further found an increase in the degree of confidence that staff execute at their tasks, if knowledge is shared effectively, as they are well-informed of developments in the workplace. KS in the LIS may also play a role in encouraging growth and learning. Through collaboration and solving problems together, staff are encouraged to pay attention to developments in their profession, thus potentially inspiring a customer service revolution (Mayekiso, 2013:94).

Biranvand, Seif, and Khasseh (2015:3) moreover state that improved KS among staff members will provide the LIS with the opportunity to discover new knowledge resources and invest in increasing them. The premise here is that, if staff are afforded the opportunity to innovate, thus resulting a better service, the LIS may become an incubator for new knowledge.

It has been argued that the sharing of knowledge will contribute to LIS finding new ways of meeting their clients’ ever changing and technologically influenced needs. Through KS, library personnel will effectively transfer their organisational know-how and collaborate with one another for better service delivery.

1.2. Problem statement

Academic libraries are operating in a changed environment. External factors such as advances in technology and changes in how clients interact with the library have created a need for the review of how services are offered to clients. Traditionally, clients needed to visit the physical library to get information, however with the growth of the Internet and social media, library clients have become more independent, preferring convenient and continuous library services.

It is argued that, for LIS to survive and remain relevant in this technological era and if a uniform standard of service is to be delivered across campuses, support staff and Librarians need to collaborate and be aware of the need to share their knowledge. KS among LIS staff members will allow them to innovate in terms of library service delivery, aimed at meeting their clients’ changing needs.

1.3. Research aim

The aim of this study was to analyse the KS practices at the LIS of a higher learning institution.

1.4. The research objectives

The objectives of this research study were as follows:
• To determine whether the LIS have an understanding of knowledge management practices and whether LIS staff share knowledge during their daily duties;
• To identify the drivers and barriers to knowledge flow within the LIS setting;
• To explore the knowledge sharing culture of the LIS;
• To highlight the role that the LIS' management play - or can play - in promoting KS practices through promoting a knowledge sharing culture;
• To identify if there are any tools currently being utilised by the LIS staff for sharing knowledge; and
• To determine possible benefits of the LIS staff sharing knowledge amongst each other.

1.5. Research question
What are the KS practices of the LIS staff members?

1.5.1. Research sub-questions
• Why is it important for the LIS staff to share knowledge?
• What are the LIS staff's perceptions regarding their KS practices?
• What are the barriers and possible drivers to KS at the LIS?
• How can KS contribute to answering the demands of the LIS clients?
• Is the LIS environment conducive to supporting a KS culture?
• What role do the LIS' management play in promoting the flow of knowledge within the LIS?

1.6. Research methodology and design
This exploratory study adopted a qualitative research paradigm as the researcher wanted to obtain a clear understanding of and explore a social problem within its natural settings (Creswell, 2009:13). This was a cross sectional study that adopted a case study strategy in order to do an in-depth investigation of the practices of KS at the LIS in its real life context. Furthermore, the researcher used purposive sampling to identify the sample from the total library population. The final sample was made up of Heads of Departments (HODs), Librarians and Library Assistants who were interviewed in order to address the research aims, objectives to answer the abovementioned research questions. The respondents were interviewed using an interview schedule with set questions as data collection tool.
1.7. Chapter layout

Chapter 1: Introduction and background

The introduction and background will provide general overview, orientation and background of the research. In this section, the reader will be introduced to the topic of KS and will be guided through the rationale of the importance of the study.

Chapter 2: Literature review

The literature review will explore the concepts of KM and KS practices in general and in libraries. Literature discussing the issue of KS practices in academic libraries will also be included in this review.

Chapter 3: Research design and research methodology

This chapter will include:

• The plan for how the research will be conducted;
• The approach, method and strategies used;
• Identification of the sample and the size;
• Data collection and analysis methods;
• Ethical considerations; and
• Limitations of the study.

Chapter 4: Results and findings

The results from the data that had been collected will be presented and discussed in this chapter. This chapter will attempt to answer the main research question and the sub-questions posed in this study regarding the KS practices at the LIS.

Chapter 5: Conclusions

Chapter Five summarises the empirical results and presents recommendations for prospective studies.

1.8. Conclusion

This chapter gave an overview of the study, thus identifying the aim of the study that was to investigate the KS practices at the LIS of an institution of higher learning.
Furthermore, this chapter also highlighted the research methodology and design employed in the study, as well as gave a chapter outline for the product of the study. In the next chapter the researcher presents a literature review aligned to the research objectives.
CHAPTER 2
LITERATURE REVIEW

2.1. Introduction

In Chapter One, the researcher identified and discussed the research problem for this study, concerning the KS practices within a higher education institution's information services division. This chapter will seek to give a clearer understanding of the literature on KS practices, specifically in academic libraries. This chapter will further outline related topics such as KM, KM in libraries, KS culture and the antecedents of these knowledge practices.

Peter Drucker, one of the pioneers of KM sums up the importance of knowledge by stating: "Knowledge is the key resource for a nation's … economic growth. It is different from the traditional key resources such as land labour and capital. The performance capital and the survival of any organisation depends on the quality and productivity of knowledge" (Drucker, 1994:66). Managing KM as a resource is therefore of utmost importance as it leads to leveraging accelerated innovation within the organisation, improved decision making and the building of a sustainable, competitive advantage (Becerra-Fernandez, Gonzalez & Sabherwal, 2004:3).

Maponya (2004:2) adds that knowledge is a key resource for any organisation's survival as it gives the organisation a competitive advantage over its competitors. Various authors agree that knowledge has become more important than tangible items such as land and equipment, which were viewed as the most important resources in organisations in the past (Czarniewski, 2014:1; Sohail & Daud, 2009:125; Gao, Li & Clarke, 2008:3; Mostert & Snyman, 2007). Furthermore, Mayekiso (2013) states that knowledge also ensures the survival of the organisation in the knowledge economy. Parirokh, Daneshgar and Fattahi (2008) also stress knowledge as an important commodity which is the driving force for both social and economic development. It can therefore be reasoned that knowledge is indeed a valuable resource for the survival of any organisation.

Many definitions for knowledge have been coined by researchers in trying to define this valuable asset. Briefly, some have called it: "the person's know-how" and "the individual's understanding" (Frost, 2013). Newell, Scarbrough, Swan, & Robertson (2009:3) state that for many years, philosophers have debated on what knowledge is. The debate was based on what Cook and Brown (1999:382) has called "epistemology
of possession”, in other words, what a person has and “epistemology of practice”, in other words, what a person does. Elaborating further, Newell et al. (2009:3) state that in the epistemology of possession, knowledge is seen as what is possessed by humans in their minds and that knowledge is a mental resource that can be developed and used to improve the effectiveness in an organisation.

This kind of knowledge is what Nonaka (1994:16) described as “tacit knowledge”, which resides within the individual’s mind and needs to be converted into explicit knowledge for organisational benefit. The epistemology of practice argues that knowledge is not only embedded in human minds, but rather in social situations and practices undertaken by skilled individuals (Newell et al., 2009:4). These individuals do not only attain new knowledge through the conversion of tacit knowledge to explicit knowledge, but through interactions with one another (Newell et al., 2009:04).

Various authors such as Jain (2007), Newell et al. (2009:3), Frost (2013) as well as Hamilton, Coldwell-Neilson and Craig (2014:67) have defined knowledge in terms of a hierarchy, which they called the “Knowledge Pyramid”, “Knowledge Hierarchy” or “Data, Information, Knowledge, and Wisdom (DIKW) Hierarchy”.

**Figure 2.1 The knowledge hierarchy**

![Knowledge Hierarchy Diagram](source: Hamilton, Coldwell-Neilson and Craig (2014:67))

In this hierarchy, as seen in Figure 2.1 above, data is seen as raw facts and figures that are not organised in any way and provides no further information to the individual (Frost 2013). Liew (2007) elaborates that data may include words, statistics, numbers,
illustrations, and images and is seen as the building blocks of communication. Jain (2007) differentiates between data and information by stating that data is raw material and has no meaning until it is converted to information by analysing, interpreting and setting it in context. Information is defined as organised, contextualised, categorised, processed, interpreted and transformed data (Jain, 2007; Newell et al., 2009:3 & Frost, 2013). Frost (2013) also adds that information paints a bigger picture when compared to data. Newell et al. (2009:4) and Frost (2013) agree that data and information are external to the individual, whereas knowledge is more personal and intrinsic.

Knowledge is either tacit or explicit and implies the know-how, personal experiences and norms used to evaluate new input (Frost, 2013). Knowledge therefore includes experiences, values, contextual information and expert insights that form the foundation for the evaluation of new information (Frost, 2013). Islam, Agarwal and Ikeda (2015:152) explain that explicit knowledge is systematic and has been codified, stored in a certain media or database and is accessible to others. It is important to note that the use of information systems play an important role in facilitating the storage and dissemination of explicit knowledge (Sanchez, 2005:5).

Conversely, tacit knowledge is created through individual learning and is embedded in human minds and is not easily shared (Islam, Agarwal & Ikeda, 2015:152). Sanchez (2005:3) as well as Krishnamurthy and Arali (2015:92) add that tacit knowledge is personal and difficult to extract from the owner, which is concerning if one considers that most of the knowledge in an organisation is tacit and remains in the heads of individuals.

The expected outcome of knowledge will be understanding (Kapeleris, 2012), deeming the application of knowledge as "wisdom". According to Liew (2013:60), practical wisdom "can be cultivated systematically in individuals and developed collectively in organisations ". However the knowledge that leads to practical wisdom and which may enhance an organisation's performance, is dependent on that knowledge being shared among employees (Hau, Kim, Lee, Kim, 2013:356). It therefore stands to reason that KS is essential in environments such as the LIS, since it will ensure that "library services and products are constantly evolving" (Anna et al., 2013:2).
2.2. Knowledge management

In defining KM, Asogwa (2012) illustrates it as a journey that will move the organisation from the area of the "knowledge chaotic environment" to an organised area of the "knowledge-centric system". This implies an aggregate implementation and integration of knowledge systems, to support the organisation's business decisions, thus placing knowledge as a key asset to the organisation (Asogwa, 2012; Milne, 2000). Additionally, Asogwa (2012) believes there is no universally accepted definition of KM, as most writers choose to define KM from their respective fields. For instance Drucker (1994), one of the founders of KM, defines KM as "the coordination and exploitation of organisational knowledge resources to give the organisation a competitive advantage". Roknuzzaman and Umemoto (2009:644) define KM as the process of managing the creation, storing, sharing and the reuse of the organisational know-how in order to help the organisation reach its goals. Becerra-Fernandez et al. (2004:31) similarly defined KM as the performance of activities involved in the discovering, capturing, sharing and applying knowledge in an organisation. Davenport and Prusak (2000) stated that KM is the management of organisational knowledge through systematic processes.

From these definitions, and for the purpose of this study, the following qualities are attributed to KM:

KM is a process that requires a series of actions or activities that are performed to achieve a particular end goal. This implies that KM is conscious and deliberate and not accidental, as all activities leads to certain expected results. The process of KM involves the following steps:

1. Development of knowledge, which includes the acquisition, creation and capturing of knowledge;
2. Storing or securing of knowledge;
3. Transferring or sharing of knowledge; and
4. The application of knowledge.

Becerra-Fernandez et al. (2004:32) state that a successful KM initiative involves the support and the use of KM mechanisms and technologies. In defining KM mechanisms, Becerra-Fernandez and Sabherwal (2010:66) noted that KM mechanisms are structural means used in an organisation to promote KM. These mechanisms include learning by doing, face-to-face meetings, Community of Practice (CoP), on the job
training and, in some instances, technology. KM technologies involve the use of information technology (IT) to facilitate KM activities and may include databases, Enterprise Resource Planning systems (ERP), Intranets, repositories, and many more (Nazim & Mukurjee, 2012; Becerra-Fernandez et al., 2004:36). These technologies are useful in the acquisition, storage, sharing and application of knowledge.

It is important to take note of the fact that emphasis of KM mechanisms should be on people sharing their skills and experiences through social interaction with colleagues, and not simply through the use of technology (Omotayo, 2015:3; Bhojaraju, 2005:38). Omotayo (2015:3) further points out that numerous organisations have finally grasped that technology-based competitive advantages are short-lived and the only way organisations can have a sustainable competitive advantages is through their employees. Thus the human part of KM (together with technology and processes) plays a pivotal role in ensuring that the organisation remains focused, achieves its objectives and sustains its competitive advantage (Omotayo, 2015:3; Edwards, 2011:299; Bhojaraju, 2005:39-40).

2.3. Knowledge sharing

KM is key to any company being competitive and having an edge over competitors. The creation of knowledge and its use in the organisation is core to its survival (Sohail & Daud, 2009; Gurteen, 1999). As noted above, KM is a process that involves the acquisition, sharing and application of knowledge. The acquisition of knowledge is the process by which new insights, skills and relationships are created. According to Botha (2007:34), the creation of knowledge is of little value and has limited impact unless it is shared with other people, specifically amongst colleagues in an organisational context. KS is therefore a key mechanism in the implementation of KM and vital to the survival of the organisation.

Botha (2007:34) states that sharing of knowledge results in innovations and consequently, there is more value added to the organisation. Adding to this, Mueller (2015:55) explains that the process of KS is important for the promotion of innovation, organisational learning, and the creation of new skills resulting in higher productivity and competitive advantage. Furthermore, KS is seen by Lin (2007:457) as core to the organisation, based on its capability to increase the organisational resources and reduce waste in terms of time and duplication of tasks within the organisation.
Sohail and Daud (2009:129) define KS as an act of disseminating and availing knowledge for it to be used in the organisation. Elaborating further, Sohail and Daud (2009:129) state that KS involves the exchange of experiences, know-hows, events, thoughts with the aim of gaining more insights. Mueller (2015:55) defines KS as the "provision of task information the ‘know-how’ and feedback in relation to procedure". Adding to the above definitions, Christensen (2007:37) states that knowledge is shared and applied in order to solve tasks "better, faster and cheaper". Wong, Tseng and Yen (2014:378) elaborate more and state that KS is linked to different management desired outcome such as employee productivity, reduced task completion time, organisational learning and innovation.

From the above definitions, one can deduce that KS is the sharing, dissemination and transferring of knowledge from one person to another, or to a group of people. KS helps individuals work with others and collaborate for better results such as the solving of a task or problem, innovation, and the development of new know-how and insights.

From different definitions of KS, one can see that KS is a social and interactive process. KS involves people working together to share their know-how with colleagues (Mueller, 2015:55; Gurteen, 1999). Harbi, Anderson and Amamou (2011:26) attest to the above by stating that through KS, organisations create new knowledge through interactions between individuals. Harbi et al. (2011:26) also distinguish between three types of KS:

1. **Intra-firm flow**: Individuals or groups sharing knowledge with one another in an organisation. This happens in one organisation, between (for example) different geographic areas. This type of KS is applicable to the library that this study focused on, not only since the LIS as a whole has branches in different geographical areas, but since the concept of autonomous sections within the library was prominent throughout this study. The issue around knowledge siloes will be addressed during the discussion of the findings in Chapter Four.

2. **Inter-firm flow**: Employees from different organisations collaborating in developing the same product. Inter-firm flow applies between two different organisations, as organisations seeks to build relationship and collaborate in order to build and recreate knowledge (Liu & Liu, 2008:426).

3. **Inter-institutional flows**: This concept covers collaborations between institutions such as higher education institutions and research companies. For instance, the newly formed Digital Humanities Association of South Africa
(DHASA) is an example of this type of knowledge flow. Different research and academic institutions (for instance CSIR, Stellenbosch University, North-West University and University of Pretoria) came together to collaborate on studying the links between the fields of Humanities and digitisation (DHASA, 2015). This collaboration on research between organisations is vital in the creation of knowledge and thus innovation.

As noted above, the intra-firm flow is most applicable at the LIS as the library consist of the main campus library in Vanderbijlpark and three satellite campuses, namely Daveyton, Secunda and Upington. Within each campus library there are subsections such as circulation, clients, IT and technical services and each of these sections has its own Head of Department (HoD). The greatest challenge faced by the LIS is to, firstly, be able to share knowledge across these sections within each campus library and, secondly, to ensure that all the processes and practices are the same across all libraries. Since this study only included the main campus, the concept of intra-firm flow in this regard relates to the flow of knowledge between the sections within this single library. However, it has to be noted that knowledge flow between the different campuses relevant to the LIS, is equally as important.

2.3.1. Knowledge sharing mechanisms

Becerra-Fernandez et al. (2004:35) defined mechanisms, as structural means used in an organisation, to promote KM. These mechanisms placed an emphasis on KS through social interaction among colleagues. Various mechanisms can be used to facilitate KS, such as:

- **Communication**: For knowledge to be shared in this manner communication plays an important role. Mueller (2015:55) states that communication plays a vital role in KS practices. Colleagues share knowledge through interactive communication, conversations and written communications such as handbooks and guidelines.

- **Communities of Practice (CoP)**: At an individual level, knowledge can be shared either formally or informally, and CoP are seen as an informal way of sharing knowledge (Mueller, 2015:55). Furthermore, Mueller (2015:550) states that in CoP, individuals with the same interests voluntarily sit together to share and enhance their knowledge in relation to their workplace or a product they are working on. Adding to the above, Christensen (2007:38) states that it becomes easier to share knowledge within one specialist group as they understand each
other better and are more likely to have the same absorptive capacity. Furthermore Christensen (2007:38) states that CoP makes it easier to share knowledge as these specialists or individuals care about their practice, they are in the same practice, so as such they talk the same technical language which they all understand.

- **Organisational networks**: KS may be realised though personal or organisational networks which are facilitated through formal or informal, face-to-face meetings or virtually through transparent community spaces (Christensen, 2007:38). Mueller (2015:55) also states that virtual networks are important when project teams are working from different geographic areas. For example, management can put in place a database where project reports, the project specifications, know-how’s and lessons learned can be stored and are made available to other project teams and for future use.

- **Information and Communications Technology (ICT)**: Sohail and Daud (2009:129) also add the element of ICT as one ways of sharing knowledge. These authors state that ICT is helpful in lowering spatial barriers and improve access to knowledge within an organisation. ICT tools such as the intranet, groupware technologies, extranets, intranet, databases and data warehouse can be used as they allow colleagues to collaborate in order to achieve organisational goals. ICT support KS and is not limited by time nor space. However, Gurteen (1999) warned that KM is about people and not only technology, and although he has stated that knowledge is not easily shared without use of technology, the emphasis in this case should still fall on the interaction of individuals.

- **Observations**: Tacit knowledge can be easily shared through observations and seeing someone in action. For tacit knowledge to be shared effectively, it requires hands on learning, observations, verbal communication and interactively work together to solve the problem, Riege (2005:25) states.

### 2.3.2. Barriers to knowledge sharing

KS barriers (KSB) undermines and labours the process of KS in the organisation, often resulting in the failure of KM initiatives (Kukko, 2013:18). KS has proven to be the foundation and the cornerstone of KM’s success in the organisation (Sohail & Daud, 2009:129), however, it is by no means a simple process to develop. Akhavan and Husseini (2015) state that KS is the most difficult step in KM due to its inherent "sticky" nature, since it is embedded in the brains of individual and its transfer tends to be slow,
costly and uncertain. Harbi, *et al* (2011:25) share the same sentiments and state that KS is a complicated process which cannot be described as straight forward.

The Merriam-Webster dictionary (2004) defines a barriers as "a natural formation or structure that prevents, blocks or hinders movement or action". In this sense, KSB are defined as factors that describe why knowledge is not shared in an organisation (Pauline & Suneson, 2012:83). Riege (2005:20) states that there are many cases in which KS failed to accomplish its objectives due to knowledge barriers. Thus the identification of KS barriers plays a vital role in the success of KM within an organisation. A number of authors concur with Riege's (2005) argument that KSB occurs at three levels, namely individual, organisational and technological (Lilleoere & Hansen, 2011:56; Sohail & Daud, 2009:130; Riege, 2005:23).

2.3.2.1. Knowledge sharing barriers at individual level

At individual level, Riege (2005:23) identified the following barriers to KS:

- **Communication**: From the above definitions of KS, it was deduced that KS is a social act involving human beings and communication plays an important role to its success. Riege (2005:24) also stated that effective communication is core to KS, adding that an individual needs to be able to express themselves both verbally and through written means, in order to successfully share their knowledge expertise. Therefore, verbal communication is seen as the most commonly used means for sharing tacit knowledge (Amin & Shahid, 2013:8-9; Riege, 2005:24). Adding to this, Bloice and Burnett (2016:129) stated that for KM (like other management models) to be successful, it must be rooted in a language which employees can understand and it should be communicated and get a buy in from all employees. Barriers to KS arise if the KM model or strategy cannot be adapted to suit the organisational context and the organisational stakeholders are unable to reach a common language (Bloice & Burnett, 2016:137). Lack of communication skills on the part of the individual makes it difficult for knowledge to be shared.

- **Time**: For KS to succeed, individuals needs to make time for the act of KS. Often, employees with valuable knowledge are very busy and have limited time. Such constraints add to barriers in KS, as people will rather spend their time accomplishing a task rather than sharing knowledge (Riege, 2005:23).
Trust: Most people are unlikely to share knowledge without trust (Zaini, Noormala & Zahariah, 2009:117). Individuals are concerned about the ways in which the knowledge they share will be used and questions arise around whether it will be misused or, on the part of the knowledge recipient, whether their informant's knowledge accurate and from a credible source. Considering this, KS is therefore more likely to succeed if individuals are operating within a network they can trust (Casimir, Lee & Loon, 2012:742).

The nature of knowledge: Cai, Goh, Souza and Li (2013) state that the very nature of knowledge makes it difficult to share. The tacit nature of knowledge acts as a barrier to it being acquired, shared and used. Tacit knowledge, due to its "stickiness"; as address above, is difficult to share, especially within a geographically dispersed organisation (Hubert & Lopez, 2013:3; Lilleoere & Hansen, 2011:56). Riege (2005:25) stated that tacit knowledge requires hands on learning, observations, verbal communication and interactively work together to solve the problem.

Knowledge hoarding: Some employees hoard on their skills and expertise to remain indispensable. Others do not share due to lack of knowledge of just how much they have and its importance to others (Agrawal & Islam, 2015:151). Lilleoere and Hansen (2011:56), Sohail and Daud (2009:131) and Riege (2005:24) state that knowledge hoarding occurs as a result of employees' belief that if they share their knowledge it will result in the "weakening of their position" and thus they might lose their own competitive advantage.

2.3.2.2. Barriers to knowledge sharing at organisational level

The barriers to KS at organisational level, as described by Riege (2005:25) relates to the corporate environment and its conditions. Hubert and Lopez (2013:3) identifies the organisational culture as a potential barrier to KS. If the organisational norms and values do not underpin and promote the sharing of knowledge, it will have a negative impact on the organisation's KS initiative. Riege (2005:27) states that an organisational culture is the "spirit" of the organisation resulting or defining how things are done within the organisation. If the organisational culture does not support KS, it might result in misalignment and miscommunication between team members, leading to conflict and lack of trust.

Another barrier to KS may be an overemphasis on the value of sharing explicit knowledge over tacit knowledge. Organisations relying on sharing explicit
knowledge tend to emphasise the use of technology to capture knowledge, whereas the organisation that relies on tacit KS, would promote a KS culture so that the knowledge, experience and skills may be passed around (Bloice & Burnett, 2016:136; Riege, 2005:25).

**Leadership** structures may also be a barrier to KS, if the organisational leadership fails to create that sharing atmosphere through motivation, offering training where necessary, and fail to communicate the importance and benefits of sharing knowledge to employees (Bloice & Burnett, 2016:139; Riege, 2005:26). Furthermore, the misallocation of key organisational resources such as finance, personnel and ICT adds to barriers to KS. Management needs to provide the much needed infrastructure that will forester and promote KS. From Riege (2005) one notes that the responsibility rests with management to work on the environment and create a KS atmosphere. For instance if poor management is in place, staff morale drops, resulting in knowledge hoarding and possibly even in resignations. If management fails to set up their organisation and work on its culture, that will result in barriers that will impede the development of KS practice in the organisation (de Melo, de Ameida, Silva, de Souza, Brandao & Moraes, 2013:189).

**2.3.2.3. Technological barriers to knowledge sharing**

According to Kharabsheh (2007:421) technology plays a vital role in KM and KS. In Section 2.3.1 above, the researcher cited Gurteen (1999) who stated that KM is about the people and not only technology; however, it was also emphasised that for KM to succeed, ICT plays an important role. Kharabsheh (2007:420) also attests to Gurteen's view by highlighting the important role that people and technology play in KS. Riege (2005:29) identified certain challenges associated with technology which may hamper or act as an obstacle to KS, such as a lack of training in new technologies or if the benefits of technology for KS are not communicated effectively. The mismatch between technology and what the employee needs may also result in KS barriers. If employees have unrealistic expectations of technology, or if they are unwilling to use the technology, it may result is resistance from employees to share knowledge (Kukko, 2013:25).
2.3.3. Drivers of knowledge sharing

Drivers of KS are those necessary elements which facilitate smooth exchange of knowledge in an organisation. Some researchers such as Ibragimova, Ryan, Windsor and Prybutok (2012), Witherspoon, Bergner, Cockrell and Stone (2013) and Kharabsheh (2007), refer to the drivers of KS as "antecedents", while others use the term "enablers" to describe the elements that promote KS in organisations (Casimir, Lee, & Loon, 2012, Lilleoere & Hansen, 2011).

Four main drivers of KS are identified by the above mentioned researchers, and include trust, a knowledge sharing culture within the organisational, rewards and IT.

2.3.3.1. Trust

Casmir et al. (2012:742) found that trust played an important role to KS as it facilitated cooperation amongst organisational employees. Lilleoere and Hansen (2012:55) state that KS is best practiced in informal settings where the issue of trust is vital. Mutual trust among colleagues rely on the belief that the other colleague will behave in a certain predictable manner, explains Wang, Tseng and Yen (2014:380). Wang et al. (2014:380) also stress that trust should not be viewed or only defined in terms of peers, but rather that it should include trust towards supervisors, management and the organisation itself. Employees need assurance that the organisation's policies are not harmful to them, for instance that after they shared their knowledge, they might lose their jobs as someone else has gained from their organisational know-how. Kharabsheh (2007:423) states that the higher the level of trust in an organisation, the more KS is likely to succeed.

2.3.3.2. A knowledge sharing culture

Lilleoere and Hansen (2011:55) state that a KS culture is one of the vital drivers of KS. The organisation thus needs to facilitate KS by promoting a KS culture. In describing organisational culture, Kharabsheh (2007:422) states that the organisation needs a positive social interaction culture in which management and employees can interact frequently, irrespective of their organisational status. Kharabsheh (2007:423) also state that more focus should be placed on encouraging interactions between employees and that needs to be embedded in the norms and values of the organisation. Witherspoon et al. (2013:254) identify the following factors related to organisational culture that result in KS promotion and success in an organisation:
• **Communication**: Organisations that promote effective organisational communication processes secure a higher frequency and quality of KS.

• **Subjective norms**: This concept relates to the belief one holds of what others expect in relation to KS. For instance, an individual may be under pressure to emulate the KS behaviour of their peers. The greater the subjective norm of KS, the greater the frequency and quality of sharing.

• **Social trust**: This relates to the belief that one's colleagues are trustworthy, reliable and honest when involved in social networking. The deeper the social trust within social networks, the higher the levels of KS within the organisation.

• **Organisational goals**: This factor relates to the individual employee's commitment to the organisation. The more committed the individual is to the organisation, the more likely and willing they will be to share knowledge.

• **Shared goals**: The more goals are shared among individuals within an organisation, the more KS initiatives will arise within the organisation.

• **KM technology**: This refers to the extent to which the organisation offers technological resources that support KM and KS. The more readily available such resources are, the more KS is facilitated, resulting in an increase in the level of KS among colleagues.

• **Organisational support to knowledge sharing**: Employees' beliefs regarding the level of support to which management is involved and promoting KS, influences their willingness to share knowledge. The stronger the belief of employees that their management is committed to KS, the higher the level of KS among employees.

These factors demonstrate that organisational culture plays an important role as a driver to KS and thus a KS culture needs to be entrenched in the organisation's strategy and also needs to be supported by the organisation's leadership (Boh & Wong, 2013:124).

### 2.3.3.3. Rewards

According to Kharabsheh (2007:423) rewards and incentives play an important role in KS. Kharabsheh (2007:423) noted that while rewards play a vital role as an antecedent to KS, employees prefer acknowledgements and personal development as a form of reward over monetary incentives. A concern in relation to incentives and rewards is
that the quality of knowledge shared may be inferior and that the withdrawal of these rewards will result in a decrease in KS behaviours in the organisation (Zaini, Noormala, & Zahariah, 2009:116; Kharabsheh, 2007:423). Adding to the discussion, Witherspoon et al. (2013:257) states that individuals will also be willing to share more if their KS behaviour will result in their personal reputation building and enhance their social position.

2.3.3.4. Information technology

IT is one of the tools that makes it possible for knowledge to be shared, thus IT infrastructure tools support the organisational KS efforts (Kharabsheh 2007:423). Witherspoon et al. (2013:255) add that the availability of technology should increase KS in the organisation. However, Kharabsheh (2007:423) is of the opinion that the availability of these tools are no guarantee that employees will use them effectively for KS. Therefore, it is important to note that, although IT is important to support KS in an organisation, it does not automatically result in employees being motivated to share their knowledge. The individual's willingness to share knowledge is what Witherspoon et al. (2013:257) describes as their intention to share knowledge, and is what ultimately determines whether or not employees will share their knowledge. According to "the theory of planned behaviour" (Ajzen, 1991:206), actions always follow intentions, and thus the individual's willingness toward KS is entrenched in their intention to share knowledge, regardless of the IT tools that are available (Witherspoon et al., 2013:254).

2.4. Knowledge management in academic libraries

KM originated in the early 90s within the business sector to help organisations survive, and gain competitive advantage, in the competitive business environment (Wen, 2005; Nazim & Mukherjee, 2012). Ever since its emergence, both academic institutions and the business sector have engaged in further research on KM theories and its implementation (Wen, 2005). KM has been successfully implemented within different sectors such as government, IT, healthcare, and in information sectors (Nazim & Mukherjee, 2012). Mayekiso (2013:32) states that universities are seen as "knowledge reservoirs and the stimulators of the knowledge reservoirs, and as the stimulators of the knowledge economy", therefore academic libraries face the challenge of aligning itself to the goals of its parent organisation by serving these "knowledge reservoirs".

Nazim and Mukherjee (2012) state that KM is seen as a new discipline in libraries. Furthermore, Nazim and Mukherjee (2012) state that KM requires new, additional
know-hows and capabilities from library and information professionals. Jantz (2001:34) agreed with this by stating that the term "knowledge management" is not typically used in libraries as it is usually linked to businesses and the use of knowledge creates value in terms of return on investment or profits. However, Heinrichs and Lim (2012:101) stress the importance of the adoption of KM practices and tools within libraries, as this will enable Librarians to adapt to the changing needs of their clients in the digital age. Roy (2015:18) supports this notion by stating that the "implementation of KM enhances the traditional functions of the academic library".

This means academic libraries need to transform from being administrators of information and knowledge, to being collaborative centres of academic resources (Asogwa, 2012). Roy (2015:17) agrees that academic libraries are competing against challenges brought about by the rise of the digital economy and that these new roles of libraries should be to become "knowledge and learning centres" for their clients, as well as a hub where "people and ideas interact in both the real and virtual environments." Libraries such as the LIS relevant to this study form the heart of the institution. The academic institution does not only expect the LIS to act as an information hub for stakeholders, but also to create knowledge storing facilities such as institutional repositories where the research output of the institution can be easily stored, is easily accessible and is shared amongst stakeholders to further the research goal of the institution. This is not an unrealistic expectation in the context of academic libraries, as Koltay, Špiranec and Karvalics (2015:89) stated: "It is the generation and management of collective knowledge which creates new structures and systems of scholarly communication."

Asogwa (2012) defined KM in libraries as the process of collecting, classifying and transferring of knowledge in the library to meet the needs of its clients. This involves the identification of what knowledge is needed to support the overall library endeavours and operations. Asogwa (2012) stresses the importance of KM in libraries by pointing out that there is so much movement among library staff, for reasons such as retirements and change of employment from one organisation to the other. When this happens, the staff who leave take with them much of the organisation's wealth in experience and expertise as most of the knowledge is embedded in their minds.

Thus academic libraries need to embrace KM to best utilise organisational knowledge for innovation, increased performance and improved competitive advantage. Krishnamurthy and Arali (2012:92) state that KM is systematically being adopted by
libraries, as these organisations have realised that they too deal with various types of knowledge that needs to be managed. These knowledge types include:

- Knowledge about their clients, for example who the clients are and the needs they have;
- Resource knowledge, for example how to match the clients' need with resources, which resources are available and where to find these resources; and
- Personnel practice knowledge, for example the know-how and skills employees possess and the quality of the service they provide.

As noted, libraries are facing challenges relating to technological advancement and experience a growing demand for more convenient services. Sarrafzadeh, Martin and Hazeri (2010:203) see KM as survival factor that will help libraries deal with these challenges.

2.4.1 The need for knowledge management in academic libraries

As noted, academic libraries are facing various challenges. According to Islam et al. (2015:40), challenges faced by academic libraries include, among others, budget constraints and demands for new services and advances in the use of ICT by clients. Despite these challenges, academic libraries are still expected to continue giving the best library services in support of their parent organisation's mission of teaching, research and learning (Sarrafzadeh, Martin & Hazeri, 2010:199).

The advances in technology puts enormous pressure on libraries to rethink its role in the ICT-centric world (Hendrix, 2010). Islam, et al. (2015:40) add that for academic libraries to remain relevant, they need to rethink, re-evaluate and redefine their role in this new digital environment and develop new ways of offering their clients the best and most convenient service. Maponya (2004:2) adds that academic libraries should not only rethink their relevancy but need to become learning organisations in order to discover how to create and share its knowledge, as this knowledge is the intellectual property of the library.

One of the most important motivators for practicing KM is that it allows the organisation to make use of the organisational knowledge in order to improve productivity (Roy, 2015:19; Wen, 2005). This includes the efficient use of human and other resources. Academic libraries have suffered from budget shortfalls and have mainly concentrated on using their budget for the acquisition of books and subscriptions to journals (Islam et al., 2015:53). In addition to this, Arif and Mahmood (2012:470) as
well as Maxymuk (2007:54) noted the fact that demands from clients have changed due to advances in technology and that academic libraries are at risk of being marginalised by Internet based information services (Krishnamurthy & Arali, 2015:94). KM can be seen as a solution that can help academic libraries to operate efficiently with reduced budgets and efficient use of human resources, to ultimately answer in the changing needs of their clients. KM implementation in academic libraries allow both professional Librarians and support staff to function intelligently (Roy, 2015:19; Asogwa, 2012). Jantz (2001:34) also stated that in academic library settings, KM can help transform the library to be more efficient as it involves the organisation and provision of access to knowledge in order to help Librarians and support staff to do their tasks more efficiently and effectively. When Librarians and support staff share and collaborate, the library becomes more effective, and its productivity and profitability is improved (Asogwa, 2012).

Furthermore, KM is important in libraries as it results in efficiency in the use of library resources and may assist the library in avoiding duplication of tasks (Jantz, 2001:34). KM also improves communication among library staff members, which cultivates a KS culture (Roknuzzaman & Unomoto, 2009:645). Asogwa (2012) stated that one of the problems libraries face, is continuity in case of a resignation or retirement. On this matter, Asogwa (2012) argues that a KM initiative will help libraries harvest the knowledge which resides in the minds of retiring or resigning individuals, before they leave the organisation. Adding to this, Maponya (2004:13) states that KM practices help extract the tacit knowledge that people have, which they have accumulated from years of hands-on practice, observations and learning from solving problems.

The application of KM initiatives will therefore result in knowledge experiences being harvested and shared broadly before they leave the library. KM in libraries could be achieved through human interaction such as brainstorming, open discussions, workshops, information sharing session, conferences and by collaboratively addressing a problem (Asogwa, 2012; Jantz, 2001). Furthermore, KM can be supported in academic libraries by using IT tools such as a website, intranet, and special portals (such as Libguides), Web 2.0., and so forth.

2.4.2. Drivers for knowledge management in academic libraries

Jain (2012) as well as Krishnamurthy and Arali (2012:94) list the following factors as the main drivers for KM in libraries:
• **KM for survival:** KM is seen as a survival factor in libraries due to increases and changes in client demands and competition from Internet-based service providers such as Google and Google Scholar. Facing these challenges, KM could help libraries discover innovative ways of providing a preferred client service (Jain, 2012:94; Krishnamurthy & Arali, 2015:94). Islam *et al.* (2015:42) also state that, for libraries to develop creative ways to serve its clients is dependent on its employees' knowledge and skills, client knowledge, and the adoption of new IT developments. Thus, through KM, Librarians will be able to better know their clients and their needs and have a thorough knowledge of what tools are available for use for creative new services.

The LIS relevant to this study also needs to embrace the tools and mechanisms that KM brings to be able to meet the ever changing needs of library clients. The library profession has developed to such a degree that there are many trends in academic libraries such as library applications (apps) for smart devices, eBooks, social media librarianship and the use of Massive Online Open Courses (MOOCs) for Information Literacy (IL). Embracing KM and KS practices will help the LIS fully embrace such innovative ideas and collaborate with each other, and their clients, for better service.

• **Increased visibility of libraries:** According to Jain (2012:140), libraries are often undervalued as they typically work in isolation and are not discernible to their parent organisation. Thus, Jain (2012:140) states that the adoption of KM practices in academic libraries could increase the library's image in an academic institution it is serving, especially if the benefits gained from implementing KM, benefits the clients it serves and therefore the institution as a whole.

KM gives academic libraries the platform to collaborate with academics. Through KM, Librarians are able to take a leading role on various issues which are important to academics and researchers, such as Open Access Publishing (OAP), copyright issues, referencing techniques and populating the institutions institutional repository (Jain 2012:140), increasing the prominence of the library in the minds of its clients and the institution.

Currently, the LIS relevant to this study, performs below average in terms of research output scoring in South Africa. The LIS has thus taken a stand to contribute in increasing the institution's research score as they are working with the Research Directorate to make it compulsory for all researchers at the institution to deposit their
research in the institutional repository ran by the library. In managing this explicit knowledge resources, the LIS is attempting to be seen as a productive part of the knowledge creation system at the relevant higher learning institution.

Furthermore, through collaboration and sharing, the library is championing referencing and copyright issues on behalf of the institution. Krishnamurthy and Arali (2015:94) elaborate on this and state that the Librarian's mission is fulfilled when the Librarian provides the right person with the right knowledge and assistance, increasing the library's visibility.

Other drivers of KM adoption in academic libraries include the following:

- **To survive budget constraints:** Academic libraries always operate on ever shrinking budgets and they are expected to do or produce more with less (Roknuzzaman & Umemoto, 2009:653; Jain, 2012:141). Through effective KM and KS, library employees could collaborate and devise innovative ways to do "more with less".

- **Resignations and retirements:** When knowledgeable workers leave the organisation without sharing what they have learned through their experiences, the organisation is at a loss. The LIS is facing such a challenge especially with such skills as cataloguing and those skills possessed by the e-resources Librarians (ETDP SETA, 2015:14). The institution had to rehire retired and resigned cataloguing and e-resource Librarians as these individuals left with so much know-how that was never transferred to the next generation of Librarians. The LIS at the relevant higher education institution is therefore in dire need of successfully implementing and KS practices, in order for the library to retain these skills within the institution.

2.4.3. Knowledge sharing in academic libraries

As noted in Section 2.2, KS is one of the steps in the process of KM (Roknuzzaman & Umemoto, 2009:644; Becerra-Fernandez et al., 2004:31). Library staff have tacit knowledge as well, which is notoriously difficult to extract (Krishnamurthy & Arali, 2015:92; Maponya, 2004:16). The tacit knowledge and expertise held by library personnel is an asset to the LIS of this particular higher learning institution, and it needs to be valued and shared throughout (Onifade, 2015:92).

Cheng, et al. (2009:314) differentiates between two types of KS, that is, closed-network sharing which occurs from person-to-person and open-network sharing which is KS
through a central open repository or database. In closed network KS systems, an individual has the freedom to choose how and with whom they share their knowledge. As noted in section 2.3.3.2, this type of KS is important as it increases the chances of building relationships and trust among colleagues. Both Maponya (2004:16) and Onifade (2015:92) are in agreement that the main problem with KS in academic libraries is that it has always been uncoordinated and informal (closed network), thus it is difficult to share knowledge in a closed network sharing which requires the building of knowledge hubs and repositories for KS.

Active KS by library employees therefore commences when individuals voluntarily contribute their knowledge and fervently accumulate the knowledge they need from other employees, thus creating a KS circle in a library (Onifade, 2015:92). For this reason, this study aimed to investigate the KS practices at a higher learning institution's LIS division, in order to identify any prevalent KS practices that allude to the type of system prevalent, and thus identifying the key drivers and barriers to KS in this particular library.

According to Onifade (2015:92) the productivity of library personnel depends on how well they share their knowledge. KS in a library lends itself to the gathering of data and information, and if executed well, it expands and extends the value of knowledge, thus improving the work quality and sharpening the decision-making and problem-solving skills of employees. Further solidifying this concept, Onifade (2015:92) states that the existence, availability and sharing of knowledge to all members of the organisation will help reduce duplication of efforts and enhance decision making; resulting in competent employees in the academic libraries.

Sharing knowledge also increase collaboration between sub departments in a library - for example the Reference Librarian knows, through contact with clients, what the clients' needs are and what they consider client-friendly; sharing such knowledge with the technical division or IT will result in the library system being more effective and client-friendly, and may encourage innovation (Onifade, 2015:92; Zhou & Li, 2012:1091).

Anna and Puspitasari (2013:6) agrees with this notion, by stating that KS in academic libraries is seen as a channel of communication and the foundation for the exchange of knowledge and technical know-hows between library employees. Therefore, the increase in communication (because of KS practices) amongst library employees will
also increase collaborations which will then lead to innovation and increased instances of problem solving (Anna & Puspitasari, 2013:6).

As noted in the paragraph above, in a closed network, library employees are able to use information technology (IT) to support and facilitate KS practices (Cheng, et al. 2009:314). Anna and Puspitasari (2013:7) also states that the use of IT allows all employees to share their expertise anytime they feel motivated to do so. However so, Cheng, et al. (2009:314) also warn that the idea of the open, informal sharing of knowledge in a library is not sufficient as both the employees and management should work hard in fostering and promoting the culture of KS amongst library employees, and retaining any knowledge that is developed and shared.

Thus, library personnel need to adopt the culture of collaboration and KS to be innovative in their services. To stimulate such a culture, library management needs to reward KS as a way of encouraging KS in libraries, as Mayekiso (2013:46) found that a lack of incentives, rewards and recognition leads to knowledge hoarding by library personnel. In other words, it is necessary for library management to entrench a KS culture and a set an atmosphere conducive enough for employees to will share knowledge as part of their daily routines.

2.5. Conclusion

This chapter discussed literature on KM, KS and KS practices in academic libraries. Possible barriers and drives for KS in an organisation was also discussed. It was established that KM and KS are vital for organisational success, as it aids in giving an organisation a competitive advantage. KM plays a vital role in the livelihood of businesses and academic libraries alike. KM is a process that does not only involve the creation of knowledge, but also KS amongst colleagues. It was noted that KS is the foundation for the success of KM initiation, as KM can only be successful if individuals collaborate and share knowledge. Advances in technology and changes in client preferences has placed libraries in a state of necessary change. Through the adoption of KM and the cultivation of KS cultures, academic libraries will be able to innovate and gain the competitive advantage needed in the face of modern technological developments. Through the use of KM mechanisms and technologies, academic libraries can stand their ground and remain relevant by offering improved and preferred services to their clients. The following chapter will discuss the research methodology and design that this study adhered to.
CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

The previous chapter dealt with the literature review which defined and described KM concepts, barriers, and drivers and sought to create an understanding in the analyses of knowledge sharing practices in an academic library setting. The literature review as Mouton (2001:87) puts it, is a starting point for the researcher. It is the review of the existing body of knowledge in the researcher's area of interest and gives an indication of how other researchers and scholars have investigated the area of interest. Thus, the previous chapter provided a theoretical impression of knowledge sharing practices in an academic library.

The following chapter discusses the research methodology undertaken by the researcher to analyse the knowledge sharing practices at the particular LIS, relevant to this study.

3.2. Research design

Levers (2013:3) states that a strong research design is a product of the researcher selecting a research paradigm that is consistent with their beliefs about the nature of reality. The research design set out in this chapter discusses and motivates the choices regarding the following elements: philosophical paradigm, research paradigm and methodological choice, research approach, research strategy and the time horizon. Furthermore, the sampling method and sampling size are discussed, as well as the data collection technique and analysis technique that were used. The chapter also addresses the elements of reliability and validity, ethics and limitations relevant to this study.

3.2.1. Philosophical paradigm

A paradigm refers to the system of ideas used by researchers to create knowledge (Levers, 2013:3). The interpretivist paradigm is the philosophical paradigm adopted throughout this study. According to Saunders, Lewis and Thornhill (2009:116) interpretivism advocates that it is necessary for the researcher to understand the differences between humans in our role as social actors. Furthermore, Saunders et al. (2009:121) state that the interpretivist's main concern is trying to make sense of the world around them from an individual's perspective and to understand the vital
meanings attached to organisational life. The interpretivist paradigm was therefore suitable to this study, as the objective of the research was for the researcher to recognise, understand and interpret human experiences within a social environment, which in this case was a workplace.

3.2.2. Research paradigm and methodological choice

A mono-method study uses a single method of investigation, and in the case of this study, a qualitative mono-method was selected (Molina-Azorín & Cameron, 2010:96). This exploratory study adopted a qualitative research paradigm as the researcher wanted to obtain a clear understanding of a social problem, and according to Creswell (2009:13), qualitative research can facilitate such an understanding. Adding to this, Babbie and Mouton (2016:53) state that qualitative researchers study human action in order to describe and understand human behaviour rather than trying to predict human behaviour, ensuring that human behaviour is understood in terms of "how" and "why". For these reasons, qualitative research was deemed to be most suited for this study, which sought to explore knowledge sharing practices at the LIS of a higher education institution. In pursuit of this goal, the researcher aimed to discover and understand the different perspectives and practices of LIS employees with regards to KS.

3.2.3. Research approach

An inductive research approach was used in this study as the researcher analysed empirical data to better understand knowledge sharing practices among library personnel at an academic library (Saunders et al., 2012:48). The data collected and later analysed was used as the basis to explore the issue at hand, in order to provide a possible theoretical explanation or hypothesis (Sekaran & Bougie, 2013:27; Babbie & Mouton, 1996:273). Neuman (2009:458) states that qualitative research is less standardised, allowing the researcher to explore the specific environment and circumstances at hand. Furthermore, qualitative research is often inductive in nature, as it is grounded in the way humans interpret their social world (Saunders et al., 2009:126).

3.2.4. Research strategy

A case study research strategy was selected as the appropriate research design for this study. A case study is an in-depth investigation of specific social phenomena in its real life context (Sekaran & Bougie, 2013:103). Case studies focus on collecting data
about either a specific object, event or action. Neuman (2009:41) adds that case studies take multiple perspectives into account and attempt to understand the influences of various levels of social systems on specific behaviours (Babbie & Mouton, 2016:281). Cases that can be studied may be processes, activities, events, geographic units, or individuals – either single or multiple (Fouché & Schurink, 2011:321; Neuman, 2009:40). Case studies are exploratory and descriptive in nature as they seek to explore and describe the case in question through detailed, in-depth data collection methods such as interviews or observations (Fouché & Schurink, 2011:321).

Yin (2014) states that case studies are a preferred methods when the researcher wants to address the "how" and "why" questions raised in research, which was the case in this study. In this study, the case study research enabled the researcher to clearly understand the application of knowledge sharing practices, the "hows" and "whys" of it, in the relevant environment. Furthermore Yin (2014:16) states that case studies employ an in-depth investigation of a contemporary phenomenon or a case in its real world context, especially when there are unclear boundaries between the phenomenon and its context. Since the research question for this study focused on a phenomenon, namely KS within a specific environment, the relevant LIS, the context within which the phenomenon was taking place, could not be ignored or disregarded, as supported by Yin (2014:16).

3.2.5 Time horizon

This study employed the use of a cross-sectional time horizon. According to Babbie and Mouton (2001:92) cross-sectional research projects are projects that are designed to investigate a phenomenon by only taking a cross-section of it at one time and doing an in-depth analyses of that cross-section. Furthermore, Babbie and Mouton (2016:92) add that most exploratory and descriptive research are cross-sectional in nature. This study thus adopted a cross-sectional research time horizon as it studied a specific phenomenon or case, namely KS practices within the LIS of the relevant higher education institution, at a specific time only. The conclusions are therefore based on observations made at one specific time.

3.3. Research methodology

In the following section, an indication is given of the research methodology used during this case study, in order to clarify and motivate the methodological choices made throughout the research endeavour.
3.3.1. Sampling method and sample size

According to Daniel (2012:1) sampling is a selection of a subset of a population to be included in a study. Strydom and Delport (2011:390) state that the idea behind a sampling theory is that a small set of observations can give an idea of what can be expected from the total population. Strydom and Delport (2011:391) further state that in a qualitative study there are no rules that govern the sample size as the sample size depends on:

- What the researcher wants to know;
- The purpose of the study;
- What is at stake;
- What will have credibility; and
- What can be done with the time and resources available?

This is obviously in direct contradiction to quantitative research which is more structured and places more emphasis on the quantity of both the sample and the population (Strydom & Davenport, 2011:390; Neuman 2009:219). Also, unlike quantitative research, qualitative research rarely draws a representative sample from huge numbers of cases (Neuman, 2009:220).

Saunders et al. (2009:237) state that qualitative researchers are most likely to choose non-probability sampling as a sampling method. Within non-probability sampling, there are various sampling types the researcher can use. According to Neuman (2009:222) and Saunders et al. (2009:237), purposive sampling enables the researcher to use their own judgment in selecting respondents that are well equipped and especially informative to answer the research question, in order to meet the objectives of the research.

Furthermore, Saunders et al. (2009:237) state that purposive sampling is most appropriate when dealing with small samples and when executing case studies, as was relevant in this study's research strategy. For the purpose of this study, the researcher chose purposive sampling and the research sample was selected based on the individuals' strategic and operational roles at the LIS of the institution.

Initially, the researcher identified 22 individuals who could potentially contribute to the goals of the study, given their position within the LIS. Four of these individuals declined to participate in the study, which resulted in a sample size of 18 individuals. However,
after the interview process, the decision was made to disregard the responses received from one more respondent, as this respondent clearly did not want to constructively participate in the interview. The respondent actively avoided answering the interview questions and instead gave ostensibly humorous or frivolous answers. Figure 3.1 below shows the final sample of 17 respondents who were selected, and who actively participated in the interviews. These respondents represented the higher education institution's main campus in Vanderbijlpark.

**Figure 3.1 Respondents and their position within the institution's LIS structure**

![Diagram showing the LIS structure with the following categories:
- The LIS' Management Committee - HODs (3)
- Client Services - Information Librarians (5)
- Technical Services - Cataloging Librarians (2); Library Assistant (1)
- Circulation - Library Assistants (6)
](image)

The researcher chose this sample, based on these individuals' strategic positioning within the LIS of the relevant institution. The sample represented Campus Librarians, the LIS' Management Committee, as well as all service sections of the library which were Circulation (Library Assistants), Client Services (Information Librarians), and Technical Services (Librarians and Library Assistants). Each one of the chosen respondents was deemed to be knowledgeable at the service point they were working at and were considered most likely to make a valuable contribution to the study.

**3.3.2. Data collection technique**

There are various techniques a researcher can use to collect data during qualitative research. For the purpose of this study, the researcher used semi-structured interviews. Saunders et al. (2009:318) state that interviews can help the researcher collect data that is reliable, valid and relevant to the research question and objectives.
According to Saunders et al. (2009:320) semi-structured interviews are not standardised and thus allow the researcher to be flexible and ask follow-up questions where needed. This is done to explore the research question and the research objectives in an adaptable manner.

Greef (2011:351) adds that semi-structured interviews are used to gain a detailed picture of the respondent's beliefs about a particular topic, allowing both the researcher and the respondents to be relaxed and to allow the researcher to explore elaborations around questions and answers. Furthermore, Greef (2011:352) states that, in one-on-one, face-to-face semi-structured interviews, the researcher will have predetermined questions in a research schedule. The schedule (see Appendix 1) guided the interview process, rather than dictating it.

A total of 17 staff members were interviewed and the researcher used an audio recorder to record 15 of these conversations. Greef (2011:259) and Saunders et al. (2009:339) state that using a recording device during an interview is permitted, provided the researcher first gains permission from respondents to be recorded. These authors also note that recording the interview is a means to control bias and therefore produce reliable data. Audio recordings therefore helped the researcher concentrate on the topic as it would have been cumbersome to capture everything the respondents were saying during the interview, in writing (Saunders et al., 2009:339).

The researcher sent the interview schedule via email to the two remaining respondents, who were Information Librarians. One email respondent worked the evening shift from 23:00 to 07:00, and the other had recently lost his hearing and thus, conducting a face-to-face interview would have been difficult. According to Saunders et al. (2009:351) it is permitted to use email interviews as an alternative and Greef (2011:354) states that there is no need for transcripts in email interviews as data is already in writing.

As noted in Chapter one, the LIS at the relevant higher education institution consisted of four campus libraries: the main library in Vanderbijlpark, and three satellite campus libraries located in Secunda, Daveyton and Upington. The sample identified initially, with 22 possible respondents, included the three satellite campuses, however with four respondents declining to participate and the response from another respondent being discarded, the only campus represented in this particular case, was the main campus located in Vanderbijlpark.
3.3.3. Data analysis technique

Qualitative data analyses is the analyses of data that is non numeric and is a product of a qualitative research (Saunders et al., 2009:480). This process takes place after data has been collected and as Neuman (2009:460) states, the researcher needs to analyse data as soon as it is received to avoid a pile up of recordings that needs to be analysed.

Prior to the analyses process, the researcher transcribed data from audio recordings into written format. As noted above, the researcher used an audio recorder to record the interviews. He then played back the recordings and transcribed every response from the interviews into Microsoft Word (MSWord). This was a time intensive task, as Saunders et al. (2009:485) points out, the process of transcribing data is in fact time consuming as the researcher listens to recordings word for word and transcribes verbatim what was said by respondents.

After transcribing the interviews and adding the email interview responses to this data, the researcher took the transcribed data and used a table format in MSWord to identify relevant themes in the data, creating categories of responses divided into different subdivisions, according to themes relating to the research question and consequent sub-questions (see Appendix 2). This ensured that similar content was categorised simultaneously, but separated based on key themes identified (De Vos, Strydom, Fouché, & Delport, 2011:413).

3.3.4. Qualitative reliability and validity

Saunders et al. (2009:156) emphasise the importance of the credibility of research findings and insist that the researcher is expected to do everything in their power to reduce the possibility of getting inaccurate outcomes. This is achievable through managing reliability and validity. Creswell (2014:201) defines qualitative reliability as the extent to which the data collection technique or data analyses process will yield consistent outcomes. Validity is by implementing strategies that ensure the findings are "accurate from the standpoints of the researcher, the participant, or the readers on an account" (Creswell, 2014:201).

Great care was taken to ensure the highest possible reliability and validity within this study. To ensure that the findings captured the individual and collective standpoints of the respondents, the researcher used one interview schedule for all respondents and treated all respondents the same without favour or bias. Furthermore, the researcher...
paid attention to detail during data analysis and ensured that the data was not compromised, by comparing the transcribed data with the recorded interviews. The data analyses tool that was applied, was used consistently for all responses. The researcher also adhered to the ethical code of conduct by not manipulating data to suit their needs. Findings were triangulated with relevant literature in the field, to ensure accuracy from the approach of the subject-field, as well as from the readers of the research in future.

3.3.5. Ethics

Strydom (2011:114) defines ethics as preferences that influence human behaviours, for example the rules that govern the conduct and the behaviour of the researcher as well as the researcher's responsibility with regards to the standard of conduct. The researcher therefore needed to evaluate his own conduct against ethical guidelines and principles to an extent that his decisions were ethically guided. Also, the researcher had to ensure that the necessary care was taken when dealing with respondents regarding a potentially sensitive matter (Strydom, 2011:115).

The researcher adhered to a code of conduct during this study, as guided by Strydom (2011:115-126). Before the interviews took place, the researcher sent a letter, requesting consent to conduct the research, to the Acting Executive Director: Libraries. His response in terms of permission to conduct this research can be seen in Appendix 3.

Furthermore, respondents were informed of their rights in terms of participating in the research and that they did so voluntarily and were able to discontinue their participation at any time. The researcher took necessary measures to ensure that respondents were not caused any harm by participating in this study, by committing to the ensured anonymity of respondents and by ensuring that the information they provided was regarded as confidential. The researcher also obtained informed consent from respondents, disclosing the use of a recording device to capture data (See Appendix 4).

3.3.6. Limitations to the research

As noted, this study utilised a case study method and a cross-sectional time horizon. The results therefore are only applicable to the specific case at the specific time of the study and cannot be generalised at different times or in different contexts. Should such a study be repeated, the results may differ. Furthermore, the results are only applicable
to one LIS library at the relevant higher education institution and cannot necessarily be
generalised across the whole institution. However, the value that may be gained from
the insights sought in this study, is not concerned with generalisability but rather with
identifying possible areas of improvement in terms of knowledge sharing at this
particular institution, which could then be acknowledged and improved across all the
libraries within the institution.

3.4. Conclusion

In this chapter, the researcher described and motivated the choice of research design
and methodology used for this study. A qualitative research paradigm was used in this
mono-method study and semi-structured interviews were the chosen data collection
technique. The sampling method and sample size were discussed in detail, as was the
applied data analysis technique. It was established that the researcher conducted
semi-structured interviews with employees of the library located on the main campus
of the institution. This chapter further highlighted the importance of credibility in
research through the adherence to reliability and validity, as expected in the context of
qualitative research, as well as ethics.

In the next chapter, the empirical research findings will be presented.
CHAPTER 4

RESEARCH FINDINGS AND DISCUSSION

4.1. Introduction

In the previous chapter, the researcher discussed the research paradigm, design and methodology which were used in this study. As stated in Chapter Three, the researcher collected data by means of face-to-face interviews which were later transcribed and analysed using a descriptive coding method. The researcher used an interview schedule which sought to answer questions relating to the following categories: KM, KS, KS culture, barriers and motivators to KS, and KS technologies and mechanisms.

4.2. Overview of the research findings

The section below summarises the key research findings for the analyses of KS practices at the relevant LIS:

- The majority of respondents had a general idea of what KM is and that it required KS in order to be successful. Respondents identified that, through KS, the LIS can make a valuable contribution to the institution reaching its goals. Respondents further believed that KS within the LIS is informal and that the instances of KS typically happen within specific LIS sections, rather than between different sections within the LIS.

- Some respondents further indicated a belief that library management could do more to promote the culture of KS within the LIS. Respondents highlighted a need for appropriate KS mechanisms that would support the implementation of KM at the LIS. Management's perceived promotion of sectional division, rather than encouraging collaboration among LIS personnel from different sections, was also identified and questioned by the respondents.

- A large number of respondents stated that there was no KS culture within the LIS. Again, the tendency of those in managerial positions to promote a silo culture among LIS sections by encouraging specialisation of tasks, was highlighted by the respondents. Findings indicated that respondents would prefer the LIS management to encourage collaboration and KS, rather than promoting a culture of division between LIS sections.

- Specific insecurities were listed by respondents as reasons why LIS employees typically hoarded their knowledge. Notably, the majority of respondents believed
that specialisation of tasks, where one person becomes the only expert in an area of operation, also encouraged knowledge hoarding and hindered the prevalence of KS within the LIS.

- Incentives and rewards were suggested by respondents as possible motivators to promote KS practices within the LIS. Currently, the LIS does not have a reward or incentive system for effective KS.

- Lastly, it was found that the LIS does not currently have any formal KS tools or mechanisms to capture and share knowledge. Respondents confirmed that LIS employees use tools such as email and social media as means to share their skills and expertise.

4.3. Discussion of research findings – contextual data

It is important to note again, as was done in Chapter 3 that the findings presented here were analysed and will also be discussed, in a qualitative manner (non-numerically). This will be achieved by describing the findings in terms of themes related to the research questions and, where relevant, by using quotations that were given by respondents during the interview process (Hennink, Hutter & Bailey, 2011:286).

4.3.1. Biographic overview

This section discusses the biographic overview of research respondents. As noted in Chapter Three, the sample for the research was taken from the relevant LIS and the researcher purposively chose research respondents based on his judgement that these respondents were holding strategic positions within the LIS and therefore were able to supply the researcher with the data needed to investigate KS practices within the LIS at the relevant higher learning institution.

The biographic detail did not influence the outcome of this research per se, however it gives an indication of how many people were interviewed, which positions they held within the LIS and how long they have been working at the LIS. The premise here was that, the longer an individual had been employed within the library, the more likely they were to have applicable tacit knowledge to share. Similarly, it was argued that the more senior the position was that these individuals held in the library hierarchy, the more experience they were likely to have, which would again potentially amount to more tacit knowledge to share.
4.3.1.1. Position

Table 4.1 below shows the frequency of respondents’ positions in the library. It is shown that the majority of respondents were Librarians. The Librarians were from the Client Services (Information Librarians) and Technical Sections (Cataloguers and E-resources Librarians). The second largest group was the Library Assistants, followed by HODs.

Table 4.1 Frequency of respondents’ positions within the LIS

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOD</td>
<td>3</td>
<td>18%</td>
</tr>
<tr>
<td>Librarian</td>
<td>10</td>
<td>59%</td>
</tr>
<tr>
<td>Library Assistant</td>
<td>4</td>
<td>23%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The position of Executive Director was still vacant at the time the research was undertaken, hence no one was interviewed in that position. One LIS HOD and one Campus Librarian opted not to participate in the study. The Campus Librarian felt she was not in touch with the main campus library and requested that she be excused from the study. The HOD pointed out his interest in the study, but did not have time to sit for an interview. A further two Campus Librarians did not respond to the email request to participate in the study.

4.1.3.2. Age group

Table 4.2 Frequency of respondents’ age groups

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20–29</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>30–39</td>
<td>5</td>
<td>29%</td>
</tr>
<tr>
<td>40–49</td>
<td>8</td>
<td>47%</td>
</tr>
<tr>
<td>50–55</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>56+</td>
<td>2</td>
<td>12%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

The above table (Table 4.2) shows the frequency of the different age groups represented in the research sample. The majority of the respondents were within the age group 40 to 49 years, followed by the 30 to 39 age group, which was represented five of the sample's respondents. The 56-years and older age group was represented
by two of the respondents, while groups of 20 to 29 and 50 to 55 years of age were each represented by one member of the sample. As noted, the age of the respondents did not necessarily influence the outcome of the research, however it gives contextual information in terms of the sample’s makeup, considering the premise that a more experienced person is potentially more knowledgeable about their work.

4.1.3.3. **Length of service at the library**

Table 4.3 Frequency of respondent length of service at the library

<table>
<thead>
<tr>
<th>Years worked</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years 0–5</td>
<td>5</td>
<td>29%</td>
</tr>
<tr>
<td>Years 6–10</td>
<td>4</td>
<td>23%</td>
</tr>
<tr>
<td>Years 10–15</td>
<td>3</td>
<td>18%</td>
</tr>
<tr>
<td>Years 15–20</td>
<td>4</td>
<td>24%</td>
</tr>
<tr>
<td>Years 20+</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 4.3 shows the length of service of respondents at the LIS. The majority of respondents had been working at the LIS for less than five years. That was followed by the respondents who had worked at the LIS for 15 to 20 and six to 10 years. Table 4.3 further shows that three of the sample’s respondents had been at the LIS between 10 to 15 years. Only one respondent has been working at the LIS for more than 20 years.

4.1.4. **Summary of biographical information**

From the biographical information discussed, it is clear that the majority of respondents were between 40 to 49 years of age and most of the respondents were Librarians. Furthermore, five of the respondents had worked at the library for less than five years, however combined, the majority of respondents had been with the LIS from between six to 20 years. This shows that the majority of these respondents were professionally trained Librarians, middle aged, with six or more years of experience working at either this library or at other libraries within the country. Therefore, the sample was deemed knowledgeable about the LIS and potentially held insight in terms of the technical know-how's of the day-to-day running of the LIS.
4.4. Discussion of research findings

As mentioned, the researcher used an interview schedule to investigate the knowledge sharing practices at the LIS. The findings of the research will be discussed next.

4.4.1. Knowledge management and knowledge sharing

4.4.1.1. Understanding of the term and practice of "knowledge management"

The respondents were asked to communicate their understanding of the term KM. Most of the respondents mentioned the issue of sharing knowledge as key in KM, however only a small number of respondents mentioned the acquisition, creation, capturing and storage of shared knowledge in their definition of KM. The researcher noted that most respondents had difficulty responding to this question. It seemed that the more senior staff members, such as Information Librarians and HODs, understood the general concept of KM better than the junior staff members such as Library Assistants.

Furthermore, the majority of respondents seemed to inadvertently blur the definitions and application of the terms "knowledge" and "information". Stenmark (2001:3), as well as Bouthillier and Shearer (2002), stated that most researchers take these terms casually and often, mistakenly, use them interchangeably even though they are far from being identical. In concurrence with this, the researcher detected how, throughout the interviews, the respondents struggled with these terms and how they found themselves jumping between the terms, using them interchangeably.

In Section 2.2., the researcher adopted a definition of KM which defines KM as a process with a series of actions and activities which are performed to achieve a particular end goal. The KM process involves the acquisition, creation, capturing, and storing of knowledge, KS or knowledge transfer and finally, the application of knowledge.

The majority of respondents stressed the fact that KM involved the sharing of knowledge amongst colleagues. The respondents recognised the need and the value that KM created in the organisation, with one respondent stating that, through KM, the organisation created value and supported the continuation of processes should "an expert" ever resign. Moreover, KM was identified by the respondents as an asset to the organisation, which could help the organisation reach its goals.

Additionally, another respondent added that KM enables organisational development and learning as "the people grow and learn from one another". However, one
respondent noted that before the organisation can implement KM initiatives, it first needed to conduct a knowledge audit in order to identify what type of knowledge the organisation had and to identify knowledge gaps. A respondent, who was part of the LIS' management team stated that it had been recorded in the minutes of strategic meetings that the library will conduct a skills audit to determine the location of existing knowledge, in order to identify needs, with the end goal of equipping library personnel with the necessary knowledge. This could potentially lead to the creation of new knowledge, as discussed by Nonaka and Takeuchi (1995:64), Nonaka and Konno (1998:14), and López (2005:664). This concept of interpersonal interaction and gap identification was mentioned by two more of the respondents as part of their definition of what they understood KM to be.

4.4.1.2. The extent to which LIS personnel share knowledge

The majority of respondents were in agreement that there was some level of knowledge sharing happening among LIS personnel, even though it was limited to specific sections within the LIS and was perceived to be informal from one individual to the other. The main KS activity identified by respondents was "Information Sharing Sessions" (ISS), during which library personnel were required to share what they had learned from attending conferences or workshops.

Originally, the ISS were meant to be a vehicle whereby library personnel shared any new skills, experiences or best practices that they had acquired, but respondents reported that these sessions were typically limited to reporting back on papers that were presented at conferences or reviewing what a respondent had learned from attending a workshop.

Respondents noted that the ISS do not really exist anymore as it seemed like

"...at this stage it is every person for himself. I think there isn't really a library structure, [or] the position of the Executive Director and thus resulting in lack of leadership in the library" and "KS at the library is not really happening. It was about to happen when the last Director was here and she was pushing it."

ISS were promoted by the previous Executive Director and that position had been vacant for more than a year at the time of this research. Consequently, respondents highlighted a lack of leadership as the reason why ISS do not take place anymore.
Certain respondents responded to certain questions that the issue of leadership was further identified as being problematic in terms of KS.

Furthermore, the majority of respondents pointed out that the KS that happened between colleagues in the LIS was informal and took place specifically during meetings. This finding supports Mayekiso (2013:33), Maponya (2004:23) and Onifade (2015:92) who found that KS at academic libraries was informal and that these institutions did not characteristically have policies that guided the implementation of KS.

The researcher also noted surprising responses from the respondents in the discussion around KS tools and mechanisms, which are not existent at the LIS, for instance:

- **Web conferencing and an intranet:** While web conferencing and intranets may prove useful for sharing knowledge, these tools are not in use at the LIS or within the relevant higher learning institution as a whole. Although an intranet does exist within the institution, it is not utilised, and when respondents were asked about this, the responses indicated that respondents were either not aware of its existence, or they did not have the password to access it.

- **Information Literacy (IL):** Respondents mentioned IL sessions as a way of sharing knowledge at the LIS. The researcher, however notes that, based on the American Library Association’s (ALA) definition of IL, there may be a misunderstanding among respondents about what IL relates to. The ALA defines IL as the ability of an individual to "recognise when information is needed and the ability to locate, evaluate, and use it effectively when it is needed" (ALA, 2016). IL trainings concerns a Librarian with the training of LIS clients on how to best use LIS resources. It was not intended as a tool for colleagues to share their knowledge with each other. The identification of these sessions as possible KS opportunities, however misguided, does however indicate a need by respondents to have interactions with colleagues where knowledge can be shared.

### 4.4.1.3. The flow of knowledge between library sections

Respondents noted that KS does not typically happen between different library sections, but rather takes place within specific sections. The issue of "meddling" was raised by respondents, where one section does not want to be seen as interfering with another section and does not want to concern itself with learning what other sections are doing. Some respondents indicated that they were more concerned with what is
happening in their own sections only. The issue of section-specific silos such as those respondents were describing, also came to the fore again. LIS personnel believed that they "belonged" to a specific section and that the matters concerning other sections had nothing to do with them.

Wendling, Oliviera and Maçada (2013:241), warn against silo KM structures such as this, where people are divided into sections, as this structure is recognised a major barrier to transferring knowledge. In these circumstances, sections will typically have section-centric goals, not keeping the goals of the institution as a whole in mind (Wendling, Oliviera & Maçada, 2013:241).

Keeping in mind the dangers of silo KS, it has to be noted that one respondent saw attempts by HODs to encourage between different sections KS as meddling in their duties. The respondent felt that other sections have "no business in our section's business" and that "our own HOD should be the one who is concerned about our section". Although this was not a common sentiment within this sample of respondents, the cultural implications of trust (Casimir et al., 2012:743; Zaini et al., 2009:117) and a lack of understanding of the change benefit of KS (Rusly et al, 2014:693) highlighted by this opinion, should be kept in mind, should KS between different LIS sections be promoted or prescribed in future.

Upon investigating the issue of the flow of knowledge between LIS sections further, it was found that a small number of respondents believed that there was moderate knowledge sharing between their sections and other sections in the library, providing the following as evidence to that effect:

- These respondents agreed that there was knowledge sharing across sections, but that it was decidedly limited. Some respondents believed that the ISS was evidence of an attempt at KS between different LIS sections; however, the respondents all agreed that the session had failed. Some respondents indicated that KS between different LIS sections was taking place on a voluntary, individual basis and it was also limited to ISS. For example, if someone from a specific section were to be interested in learning about a topic while a Librarian was conducting training on this topic, they were more than welcome to attend such a training session, but the application of this knowledge was not elaborated on or related to the particular individual's know-how and skills in the everyday work environment.
• One respondent mentioned **job rotation**, which takes place at the Circulation Section, as a KS platform in the LIS. The researcher however notes that, in itself, job rotation is restricted in its practice within the LIS, as it is limited to the Circulation Section and is not practiced by other sections within the LIS.

• Another respondent believed that there was room for improvement in terms of **explicit knowledge flow** at the LIS and believed that there should be "...a platform were people have access for library plans, policies, procedures, reports, strategies, there should be a platform for knowledge sharing. We lack the culture of collaboration and we enjoy more working in silos than actually mixing with other sections within the library."

• One respondent did view the use of email as one way in which they ensure transference of explicit knowledge between sections, as "every now and then" the LIS sent emails to all university staff members, via an email platform called E-communication, in which they inform staff about new initiatives at the LIS and how these can be used as well.

The majority of respondents, however, believed that there was no KS taking place between the different sections within the LIS. This confirms findings by Rusly *et al.* (2014:692), regarding tacit knowledge not always being shared voluntarily among experienced professionals. One respondent, who spoke on behalf of the current LIS management, stated that there was planning taking place towards implementing KS between LIS sections from their side, but that there was no execution of such plans yet, for instance, the general staff do not know of management's plans to create a KS platform across all sections of the library. The possibility of management's intervention in this issue is encouraging, as it is the responsibility of leadership to stimulate a KS culture in knowledge intensive environments where "knowledge transfer and exchange is grounded into the daily routines" (Karlsen, Hagman & Pedersen, 2011:77).

Other respondents viewed general staff meetings, which included different sections, as a potential platform that could enable the LIS to share knowledge between different sections. Some respondents indicated that they would favour such meetings, in order to be made aware of initiatives taking place within other sections, and to stimulate possible collaboration.

The researcher notes the importance of KS taking place between the various sections within the LIS, as this will enable the LIS to ensure a better client experience. For
example, client service suffers when clients have to be turned away because only one person mans a specific service and s/he is not available to assist. For instance, in the LIS, only one person does quotations for lost materials and only one person can override the system when there are fines to be waved; the list of such examples is extensive.

4.4.1.4. Library management's role in sharing of employee skills

The majority of respondents believed that the ISS were intended to be the vehicle to ensure KS and skills transfer within the LIS. As noted, however, respondents also strongly questioned the effectiveness of these sessions. Respondents were of the opinion that, without ISS being "pushed from the top", they are ineffective. Since the former Executive Director was the one pushing for knowledge sharing through ISS, there is merit to this opinion, since after the departure of the former Executive Director, the ISS have lost their efficacy. In their current form, respondents noted that ISS were obviously ineffective, as only feedback on workshops and conferences were given during these sessions, instead of sharing what the individual has learnt. Furthermore, according to the respondents, what makes ISS futile as a vehicle towards knowledge sharing was:

1. The belief by some respondents that, when one attends either a workshop or conference; they do so for their own career enrichment and not for the LIS as a whole.
2. That most staff members would rather not attend any conferences or workshops, because they were afraid that if they attended anything, they would then be expected to give feedback in an ISS. Thus, knowledge creation is hampered as staff, many of whom were junior staff members, were "afraid" to stand in front of a group and give a presentation on their acquired knowledge or skills.

Another issue highlighted by the respondent representing the LIS' management, related to initiatives concerning skills development within the LIS. According to this particular respondent, management's biggest challenge was the tendency of LIS personnel to feel entitled to an increase in their salaries if they gained a new skill:

"But some of the managers argue that the LIS staff members, when you teach them something and they know it; they perform those tasks and they expect to be paid for the new knowledge".
Thus, it is difficult to encourage employees to gain skills as there seems to be a tendency for these enriched employees to, in turn, demand job evaluations and salary increases.

**4.4.1.5. The role of KS in adapting to clients' preferences**

The majority of respondents believed that KS is important in the library as a means to meet the changing needs of library clients. As noted in Chapter One (Section 1.2.2.), KS is valuable for the creation of new knowledge in the library and therefore gives the institution a competitive advantage through cultivating innovation. KS thus contributes to libraries finding new ways of meeting their clients' ever changing and technologically influenced needs. As noted in Chapter One, advances in technology changed client preferences on how they access the library and how they will receive help from the library. Clients prefer convenience rather than physically being in the library to get information.

Noting this, respondents saw KS as an important enabler in the library, as it results in satisfied clients. Respondents indicated that, through KS happening within the LIS, clients are able to get service, even if the designated librarian or contact person was not present, since library personnel shared their skills. This ensures that there is continuation of tasks and that clients will not be expected to wait for "the" person, if looking for assistance in a specific field in the library.

**4.4.2. A knowledge sharing culture and the role of the LIS' management**

In this section, focus falls on questions around the KS culture and the role the current library management plays in promoting a culture of KS.

**4.4.2.1 If and how the management of the LIS promotes a culture of knowledge sharing**

Respondents were asked to explain if and how the LIS management promotes a culture of KS. Respondents' views on the question were divided on the issue of KS culture promotion. Some respondents plainly believed that the LIS management was not doing anything to promote the KS culture. Others believed that there is a promotion of such a culture, even though it is limited.

Those respondents who believed that management promoted the KS culture, believed that the evidence of that was the ISS, which requires that personnel share what they know with others after attending a workshop or conference. It has already been established that the ISS were actually ineffective as a KS mechanism, as the current acting management of the LIS are not encouraging or imposing any sharing through
these sessions. One respondent pointed out that acting managers were "…used to do it through information sharing sessions, I wish I knew what stopped it. Maybe because we do not have an Executive Director and Acting Managers who are unable to enforce such practices".

It is suggested that, for the culture of KS to be promoted at the library, the LIS' management needs to do more than just promote ISS, but rather look at incorporating technology and more informal KS mechanisms (Schwaer, Biemann & Voelpel, 2012:3615). The task of introducing and creating awareness around technological tools, such as wikis or microblogs, will require committed support from library management (Paroutis & Al Saleh, 2009:59). However, the incorporation of informal KS mechanisms, such as CoPs, should not typically be directly governed by management (Schwaer, Biemann & Voelpel, 2012:3615), but will depend on the cultivation of a KS culture (Rai, 2011:779). One respondent, who was a member of the LIS' management, said they believed that there was planning being done around ensuring that a culture of KS is promoted in the library.

Again, respondents indicated that it seemed as if managers were encouraging KS only on a sectional level. Respondents stated that their managers were encouraging them to share their expertise with colleagues in the same sections, and were encouraging collaboration among section-specific colleagues during training sessions. The respondents representing Circulation Services were adamant that they believed that the best way for them to promote KS was through staff rotation, which this section practiced in order to ensure that all their staff are well equipped to work on any service point in the library within the Circulation Section.

From the above discussion, it is clear that the majority of respondents believed that LIS management could do more in terms of the promotion of a knowledge culture. As noted by Samaar and Junaid (2011:24) and Gurteen (1999), organisational leaders have an influential role to play in the promotion of a KS culture. The buy-in of library management in terms of the potential benefits of KS and their promotion of a KS culture, will potentially encourage the LIS employees to follow suit. Thus, it is the responsibility of leadership at the LIS to motivate employees to share their knowledge and to convince these employees of the value and the benefits of KS. It is therefore the LIS managements' responsibility to move the organisation from the typical belief that hoarding knowledge is power, to a modern one that believes in sharing and
applying knowledge to create a competitive advantage (Donate & de Pablo, 2015:366; Becerra-Fernandez et al., 2004:3).

4.4.2.2. The attitude of library staff members towards sharing knowledge

On the question of perceived attitudes displayed by LIS staff members when they have to share their knowledge with their peers, more junior or senior to them, the respondents were also divided. Some respondents experienced positive attitudes whereas others experienced negative attitudes from their peers, towards KS. The question sought to understand how library personnel felt about sharing knowledge with junior or senior staff members.

Most respondents indicated that they experienced sharing knowledge with junior staff members, if they themselves were in a higher hierarchical position, easier than if the person they were expected to share knowledge with was in a higher hierarchical position to themselves. This might be because most Librarians started from the bottom of the hierarchy either as Shelf Packers or Library Assistants and studied their way up the hierarchy while working, implying that they would know a lot about the positions lower down on the library hierarchy, form experience.

One of the respondents attested to this by stating that she had worked in all sections of the library and thus junior staff members “cannot tell me anything”. This respondent also noted that she was more knowledgeable than the junior staff members, therefore she is in a better position to share her knowledge with them. Furthermore, this respondent was of the opinion that only new, junior staff members would benefit from KS with other junior staff members, as that would assist them in understanding the organisational culture better. These are examples of a condescending tendency of senior staff members undermining junior staff members when sharing knowledge, because they assume that junior staff members cannot grasp such knowledge and share their know-how. Admittedly, the senior staff members also limited their KS according to their own perception of how much a junior staff member can grasp or how much they have to share.

The issue of sectional silos was again mentioned as most respondents felt that they were being directed to work only within their own sections and not go beyond their sections to understand how other sections are functioning. Respondents mentioned sectional silos in terms of culture, in other words, it is the LIS’ culture for people to operate only within the area they work in and not to seek to grow beyond their current
job descriptions. This silo culture not only limits collaboration, it also limits any potential innovation that could arise within the LIS (Pickering, 2013:36).

Senior respondents pointed out junior staff members' unwillingness to learn and cited this as the reason why junior staff members prefer not to interact with senior staff members. However, from the attitudes displayed by senior respondents, it becomes evident that KS within the LIS typically only happens one way – from the top down. Instead of senior staff members also being open to learning from junior staff members, the general sentiment from senior respondents was that they believed that only junior staff members had anything to gain from KS.

Perhaps that might be true due to the fact that they have obtained higher degrees and have more years of experience in libraries, however trends and systems changes daily and every person is a master of their own work irrespective of whether they are junior or not. For instance, the library recently purchased a new circulation system. It is mostly used by circulation staff and, taking senior staff members' attitude into consideration, in the case of an emergency these senior staff members will not be able to assist clients on the system, since they are of the opinion that there is no need for them to learn from junior staff members. To ensure effective client service, every staff member, regardless of seniority, should have a working knowledge of all library operations. This will ensure that no client is turned away or inconvenienced when making a simple request.

4.4.2.3. The LIS management's commitment to promoting knowledge sharing

Respondents were also asked if they believed that the LIS' management was committed to promoting KS amongst colleagues within the LIS. Findings here showed that more than half of the respondents believed that LIS management was not committed, or at least not doing enough, to ensure that knowledge is shared in the LIS. A smaller number of respondents believed that management was committed or only partially committed to this cause.

The respondents that initially stated that LIS management was committed to promoting KS, contradicted themselves upon further elaboration. These respondents highlighted limitation to the commitment by LIS management with regards to KS. Respondents pointed out the lack of three resources as a hindrance to their efforts and commitment to KS. Specific reasons included:

• One respondent stated that employees have suggested that the library only opens to its clients at 10am on Wednesdays, to allow staff development and KS
during the first few hours of the working day. The respondent noted that, even
though this was approved by the Deputy Vice Chancellor (DVC) in principle, it
never really materialised, as library personnel were not committed to it.

- Furthermore, respondents representing the LIS' management stated that they
  have requested the implementation of a technology platform for departmental
  knowledge to be shared, but this has not been granted due to a lack of staffing
  and financial resources.

- Another respondent stated that there was a culture of overreliance on emails and
  meetings to share knowledge, but that these strategies proves inefficient for KS.

From this discussion, it seems that the LIS' management was divided on the issue of
promoting KS, as some respondents stated that there were those managers who
typically shot down any attempt to launch KS endeavours in the LIS. According to
respondents, these managers apparently believed that KS would interfere with the
running of their own sections, and some believed that, if for instance staff from the
Circulation Section were to be trained on how to conduct a reference interview, the
Librarians' roles would become redundant. Respondents noted that these managers
did not see KS as a potential skill building endeavour, but rather as a threat where
other sections would become opportunistic in a threatening manner.

The majority of respondents believed that the LIS' management was not committed to
promoting KS for various reasons. Some respondents felt management hindered
knowledge creation in the library as they did not allow their staff members to learn
anything from other sections. These respondents felt that their HODs "put them on a
leash" and limited their interactions with other sections within the LIS. Some
respondents also reported that their managers did not allow staff to attend conferences
and skills development workshops and stated that this was demotivating to them.
Respondents believed that library management identified "good conferences" for
themselves. Additionally, respondents felt that the LIS' management believed in
specialisations among employees. According to respondents, there was a presence of
managers who believed that certain skill sets belonged to specific people, and that
others should not go beyond a certain point in equipping themselves with the same
skills.

As noted previously, the management of the LIS has a very important role to play in
terms of the implementation and promotion of KS. From the discussion of these
findings, it becomes evident that the majority of respondents did not believe that the LIS' management was making a meaningful difference to promoting KS among employees, instead they were perceived as hampering it by encouraging task specialisations. This was also evident on the question regarding knowledge hoarding (see Section 4.4.3.1 below) among colleagues, where respondents believed that the issue of specialisation was at play at the LIS and that this was key to hindering KS. Thus, the LIS' management needs to reassess its strategy regarding KS and should aim to create a KS-friendly culture at the LIS, by motivating KS and rewarding KS when it happens (Lilleoere & Hansen, 2011:55; Kharabsheh, 2007:423).

4.4.2.4 The LIS management's role in knowledge sharing

Respondents were asked how the LIS' management encouraged skills and expertise sharing after conference or workshop attendance. All the respondents were in agreement that this knowledge was meant to be shared through ISS. ISS, as noted, was the brainchild of the previous Executive Director who sought to create a platform for colleagues to share what they know, or have learned, with other colleagues. The Library Administrator was tasked with keeping track of who attended conferences and then had to arrange an ISS for the conference attendee to share what they had learned from the conference that they had attended.

Sharing knowledge was compulsory for anyone who wanted to attend a conference or workshop and, as noted as well, some respondents cited a fear of standing in front of the people at the ISS, as reason enough not to attend any conference or workshop. One respondent plainly stated that most library personnel opted not to attend any training, that is; they preferred not to learn anything new mainly because they had a fear of standing in front of people and presenting or sharing during an ISS what they learned. The issue of fear was also noted as a reason why people chose to hoard their knowledge as they felt uneasy standing in front of a group and sharing knowledge and expertise.

Furthermore, the ISS was not originally limited to only sharing knowledge after conference attendance, but was meant to include the sharing of any new skill a person had attained, be it benchmarking, best practices or even from reading an article. After the departure of the previous Executive Director, library management did not encourage such sessions any more.

One of the respondent stated that the reason for the current failure of ISS was because the current library management were the ones who never shared in the past what they
had learned from various international conferences they attended and it became
difficult for them to demand that library personnel share whereas they were guilty of
not leading by example.

Moving forward, one therefore needs to ask if ISS was the only way the library could share their knowledge. Literature points to many mechanisms that library personnel can share their expertise such as, for example, CoPs and moreover the incorporation of technology may not be as difficult and expensive as library management believes. There are many cloud computing and collaboration services available for free on the Internet through which the library could create a knowledge hub and upload their organisational know-hows from which any staff could tap in at any moment.

Rafiq, Bashar, and Shaikh (2014:6) state that the Cloud Computing Model could afford the library with various advantages when compared to the traditional KM IT setup. It will thus help the LIS with setup savings and maintenance costs (Bimol, Saikia & Devi 2014:226). Furthermore Sultan (2013:161) states that Cloud Computing allows organisations to have access to up-to-date and new IT developments at affordable rates. The library could also invest in making their intranet work, which is already set up, but not populated.

4.4.2.5 The respondents’ beliefs regarding knowledge sharing

The majority of respondents agreed that they believed in sharing their knowledge with others for various reasons. The respondents believed that if they did not share their knowledge, they would be creating specialisations and in their absence, everybody will have to wait for them to come back and help students. These respondents viewed KS as a mechanism enabling continuity within the LIS in cases such as retirements or departure from the LIS.

One respondent stated that sharing will ensure that everyone in the LIS is on the same page as far as services are concerned and students will get the same level of service from all library personnel. Another respondent stated that, if she shared her knowledge with others, it will lead to less pressure and responsibility on her as a single individual. This indicates a belief that sharing your knowledge can also act as a motivational factor for the recipient of the knowledge being shared, as they are honing their skills.

One respondent stated, however, that library management sometimes hinders such KS. The respondent stated that "...the reason I went to school was to learn and gain knowledge and to be in a position to help other people. But there is that barrier that if
you tell your boss what you know, it becomes a problem and thus you receive bad consequences for wanting to share what you know." Another respondent agreed with this and stated that some HODs may be threatened if they are perceived as knowing less than their subordinates, when these subordinates are sharing valuable knowledge with colleagues.

4.4.3. Drivers and barriers to knowledge sharing

The following section discusses the respondents' view of the drivers and barriers to KS.

4.4.3.1. Reasons for knowledge hoarding

As illustrated in Figure 4.1, respondents listed reasons why they believed people chose to hoard their knowledge within the LIS.

Figure 4.1 Reasons for knowledge hoarding

The majority of respondents identified insecurity as the main reason why they chose not to share their knowledge. Other reasons for knowledge hoarding was identified as follows:

Self-interest

- One respondent stated that it was her choice not to share. While attending workshops is seen by many as a privilege, there are membership fees paid to library associations such as LIASA. This respondent felt that since she paid for her membership with money from her own pocket and while attending the
conference, it is her time and energy that gets expended, that she should be entitled to being selfish and not be expected to share any knowledge. She believed if any person needed to learn, they must take the steps necessary to develop themselves rather than "wait for someone to just spoon feed them".

- A further two respondents shared this sentiment and believed that what they learned was their own knowledge and they could not be expected to share it with others. This view is however in contrast to literature, which clearly states that the knowledge one gains while in the employ of the organisation is the intellectual property of the organisation and not their own (Bănacu, Bușu & Nedelcu, 2013:491; Kostagiolas, 2013:378; Smith, 2001:312). This belief also stands directly in contrast of what a KS culture requires.

- Another reason given for self-interest in hoarding knowledge, was that some respondents felt the need for recognition and received praise if they are champions for what they know, and if in their absence, no one can do their work.

Management attitudes

- One of the respondents felt that LIS management played a negative role in encouraging knowledge hoarding by limiting what knowledge there is to be shared. This respondent noted that they felt that the LIS’ management encouraged silos between sections and as such, control what knowledge can be shared and who is allowed to share it. This respondent also felt that this tendency was encouraging staff members to hoard their knowledge, as staff felt discouraged from making any attempt to share knowledge.

Attitude

- Another respondent believed that functioning within in a negative atmosphere regarding KS, resulted in a widespread negative attitude towards KS, which in turn discouraged any attempts at KS and thus resulted in knowledge hoarding. This response indicated that certain LIS employees could perceive themselves as being surrounded by a negative attitude and as if they would be victimised if they shared knowledge beyond what is perceived as being allowed. This respondent specifically felt it best to shut themselves in their sections and not interact with personnel from other sections. In general, most respondents felt more secure when operating only within their own sections, as is evident from this quote: "I think that is why we are still surviving and we still feel we have each
other. If you [are sitting] in the office and you are aware of this negativity around you, you will say why should I… [share my skills]?

**Specialisation**

- A notable number of respondents mentioned the issue of specialisation as a reason for not being willing to share knowledge. These respondents believed that knowledge is power and as such, the person with knowledge will be recognised as a specialist in the specific task and this will give them leverage within the LIS, making them feel accomplished, and implying that the success of the LIS is dependent on them.

- On this point, certain respondents also cited the issue of IT limiting LIS personnel's access to systems. The respondents suspected that this was a way for the IT division to remain the specialists in their own field, even if many IT related problems could be fixed by the LIS personnel themselves.

**Insecurities**

- Based on the responses, it became evident that, at the core of the above reasons to hoard knowledge, lay the fears and insecurities of individuals with regards to sharing knowledge. Most of the respondents attested to the fact that the majority of LIS employees hoard their knowledge due to their fear that once they shared their knowledge, they will lose their power, possibly losing their jobs by becoming redundant in the workplace.

- Many respondents feared that they would be replaced by younger candidates who were more technologically savvy, and thus they felt that the only way to hold on to their positions was if they hoarded the knowledge that they did have. Most respondents simply stated that this motivation for knowledge hoarding resulted from a need to still feel needed by the organisation.

4.4.3.2. The need for knowledge sharing incentives

The researcher asked the respondents if they believed that giving incentives or rewarding people will encourage people to share knowledge. Although the majority of respondents believed that rewards and/or incentives would act as motivators for people to share their knowledge, the remaining respondents believed that incentives and rewards will not encourage people to share their knowledge.

The researcher then asked the respondents who disagreed with incentives and rewards as motivators, to elaborate on their view that incentives and/or rewards will
not encourage people to share their knowledge. The respondents that disagreed stated various reasons. These respondents mainly believed that it depended on the person’s inherent willingness to share and that ultimately, incentives and rewards will not change how a person felt about sharing, meaning if a person believes in sharing, they will share with or without being rewarded.

This view is in support of a study conducted by Cockrell, Robinson and Stone (2013) who studied and compared the financial and higher education industry in terms of the impact incentives and rewards have on KS. In their findings, these researchers established that incentives and rewards were yielding positive results for higher education and negative results for the finance industry. Furthermore, they found that in organisations that were branded by distrust and where employees feel that KS was obligatory burden from above, rewards and incentives never made any difference as people just shared for the sake of receiving incentives (Cockrell, et al, 2013:23).

Contrary to the above authors, Hung, Durcikova, Lai, and Lin (2013:416) acknowledged that there have been divisions in researchers’ views of using incentives and rewards as motivators for KS. These disparities have led to researchers questioning the impact of rewards and incentives in KS (Hung, et al., 2013:417). However, some researchers do believe that rewards and incentives can be a motivator for KS. These sentiments are shared by various researchers who have found that offering employees rewards and incentives decreases knowledge hoarding while increasing the likelihood of KS (Hung, et al., 2013:416-7; Šajeva, 2014:133; Mathew & Rodrigues, 2015:773; Dermol, 2011:347).

Furthermore, the issue of quality of shared knowledge was mentioned by a few respondents. These respondents felt that if people were rewarded, they might overlook the quality aspect of the knowledge they shared, as they would only be motivated by getting the rewards, even if they are offering poor quality knowledge. According to Jahani, Ramayah and Effendi (2011:89), Hendriks (1999:99) and Gurteen (1999), incentives and rewards do increase the frequency of KS in organisations, but do not guarantee the quality of the knowledge that is shared.

Lee, Gon Kim and Kim (2012:187) argued that management not only played an imperative role in increasing the level of KS within an organisation, but that management also affect the organisational norms that govern the quality of the knowledge that is shared. Furthermore, Wang and Noe (2010:120) found that sharing knowledge within social networks, for instance CoPs, where there was high levels of
trust among employees, also increased the quality of the knowledge being shared. The researcher is therefore of the opinion that the LIS' management needs to focus not only on rewarding KS, but leading by example in ensuring that the knowledge is being shared is of a reputable quality.

Interestingly, one respondent pointed out that the job-related knowledge a person had is not theirs but rather belongs to the organisation, and as such there is no logic to the organisation paying someone again to give back what belongs to the organisation in the first place. This respondent also felt that the greatest reward a person can get for sharing their knowledge, will be to see the fruits of such knowledge in someone applying it to improve on their work. This was, however, not a common theme among responses on the matter of rewards and incentives.

The researcher asked those respondents who believed incentives could encourage people to share their knowledge, to list those incentives or rewards. Respondents listed various incentives and rewards which they felt will suffice and motivate them to share their skills:

- **Recognition**: Certain respondents felt simply that public recognition was enough to motivate them to share. Unlike rewards, which are transactional and tangible, recognition does not involve anything tangible. Recognition is more personal and it involves celebrating people for what they do (Saunderson, 2013).

Furthermore, nominating a person who shares knowledge diligently for an employee of the month award, was mentioned as a possibility by three different respondents. Employee of the month recognition was practiced at the library. However, library personnel boycotted this practice, as the library management expected library personnel to choose whom believed should be nominated for the employee of the month award, and consequently, it ended up being reduced to benefitting those employees who were more popular and the formation of a "nomination clubs". These clubs ensured that people were not nominated on merit but nomination happened according to a roster: this month we nominate person A and next month, we nominate person B and so on. As a result, LIS personnel questioned the merit of this award. With that being said, respondents still believed that the employee of the month status could be given as a reward for KS and, if managed effectively, it will motivate them to share their knowledge.
• **Monetary incentives**: Respondents also believed that money as a reward would definitely encourage them to share their knowledge. The person who won employee of the month (discussed above) was always rewarded with a R500 voucher from Pick n Pay or Game. Respondents reported that the issue of money and/or bonuses is decidedly complex, as it includes endless red tape and bureaucracy to get approval. For instance there is no existent performance management system at the institution, which could have been used to link KS to Key Performance Indicators (KPIs).

As such, without a performance management system to link to, it becomes difficult for the LIS to motivate and pay KS bonuses. This again leaves the suggestion of vouchers as rewards as a viable motivational option. According to respondents, the LIS would be able to include planning for such vouchers in their annual budget, and if these are approved, they could be awarded to deserving employees.

• **Promotion**: Lastly, a respondent mentioned possible promotion as a motivation to share knowledge. However, this does not seem feasible. Respondents noted that there are HR policies involved in promoting people and thus promoting people only on the basis of sharing knowledge, is not feasible.

### 4.4.4. Knowledge sharing tools and mechanisms

The following section discusses this study’s findings around KS tools and mechanisms identified and used in the LIS. The respondents were asked to identify ICT tools which were available and which the LIS used for KS, and to state their level of understanding and skills of how to use these tools and mechanisms.

#### 4.4.4.1. Knowledge sharing tools and mechanisms within the LIS

Table 4.4 shows the KS tools and mechanisms that respondents identified as currently being available in the LIS. In terms of KS tools, the majority of respondents mentioned email as the tool they use most to communicate and share knowledge with their colleagues. Currently, the institution does not utilise its intranet or extranet, mentioned as potential KS tools.

Social media was mentioned as the second most popular tool available in the library. Most respondents mentioned sites such as Facebook, Twitter and even WhatsApp, as being potential tools to share knowledge among each other. The LIS has official Twitter and Facebook accounts which are linked and managed by the Reference Librarian.
Table 4.4 Lists of KS tools and mechanisms identified by respondents

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<thead>
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<th>Knowledge sharing tools</th>
<th>Knowledge sharing mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>Face-to-face informal and formal meetings.</td>
</tr>
<tr>
<td>Groupware</td>
<td>Library newsletter</td>
</tr>
<tr>
<td>Social media</td>
<td>Institutional repository, marketing, LMS groups.</td>
</tr>
<tr>
<td>Extranets</td>
<td>Workshops</td>
</tr>
<tr>
<td>Intranet</td>
<td>Presentations</td>
</tr>
</tbody>
</table>

The platform is used as a communication and collaboration platform as colleagues share tips amongst themselves and with the relevant higher education institution's stakeholders. The use of social media to share knowledge seemed to be more practical and cheaper, as most library staff were already using social media privately. Adamovic, Potgieter and Mears (2012:2) stated that the use of social media for KS makes sense, as it is dynamic and allows for instant communication between employees. Also, Gaál, Szabó, Obermayer-Kovács and Csepregi (2015:194) identified various social media tools that can be used to share knowledge, more specifically in a decentralised organisation such as the LIS.

KS mechanisms identified by respondents included sectional and general meetings. In the Client Services section for instance, the LIS normally allows each Information Librarian to share with the team a new skill they may have gained through interaction with others, or even to demonstrate the use of a new database they believed could assist other Librarians do their jobs better. Meeting were therefore seen by some respondents, as playing a vital role in sharing one's expertise within the LIS.

A large number of respondents also mentioned the Library Newsletter, Libnews as a KS mechanism. The library newsletter is published on a monthly basis and it includes the "how to" section which is populated by Information Librarians. In conjunction with academic members of the institution, the Information Librarians include content on how to carry out LIS-specific tasks; mostly around best practices on a new or trial database.

Lastly a smaller number of respondents mentioned interest groups and committees that are available in the LIS and, according to respondents, could be viewed as potential KS mechanisms. These included the Institutional Repository Group (IR), the Library Management Systems Group (LMS), and the Marketing Committee (MC). The
meeting times for these groups vary from group to group, for instance the LMS team, which deals with all library's systems issues, meets every Tuesday afternoon. The group is comprised of representatives from all sections of the library and they discuss and deal with all matters relating to the library systems and the problems encountered by clients.

One respondent did mention however that the library could do more as the tools identified above are mostly general tools and not necessarily focused on KS per se. This respondent believed that the library needed to have its own portal that all the best practices and the know-how can be uploaded and accessed from this portal at any time. The respondent also suggested that the library could even use more cost effective solutions such as Dropbox or a free cloud service, to load its best practices onto. The respondent mentioned that all employees would then be able to load and edit whichever information is uploaded and in that way, collaboration and continuation can be encouraged.

**4.4.4.2. Skills necessary to use the knowledge sharing tools and mechanisms**

On the question of whether respondents have the necessary skills to use the KS tools they had mentioned, the majority of respondents agreed that they did have the skills to use the tools. The remainder of respondents were divided on the matter: some respondents said they did not have the necessary skills, whereas the rest said they preferred not to say.

The issue of age was raised as a respondent referred to herself as a BBT ("born before technology") individual, and as such she indicated that even though she knows of the tools that are available, her age and disinclination towards technology, made it difficult to fully take advantage of such tools. Another respondent mentioned that she did not really like technology, especially social media. When the researcher asked this respondent how she communicates with her clients who are technological natives, as the concept of embedded librarianship is meeting the clients wherever they may be and social media is the backbone of this concept, the respondent answered that the clients know where to reach her besides social media.

Most respondents also stated that they listed the available tools because the institution does not have any other KM or KS tools at its disposal. Furthermore, respondents pointed out that their choices for the inclusion of KS tools on this list were influenced by how practical these tools were to use and how client-friendly the tools proved to be. Applications such as email are known and used as a communication tool all over the
world. The researcher notes that the tools identified and used by respondents support informal KS that is experienced at LIS. These are not traditional KS tools but day-to-day applications being used to answer a need for KS.

4.5. Conclusion

This chapter presented the analysis of the empirical findings of the study. It was revealed in the findings that the majority of respondents saw value in KM and KS. Regrettably it was also revealed that there are no formal KS activities within the LIS, and that the KS activities are limited to ineffective ISS and knowledge is only being shared informally between colleagues. The findings additionally showed that the KS culture within the LIS was decidedly siloed and did not encourage KS between different sections within the LIS. Furthermore, it was discovered that most respondents believed that incentives and rewards would motivate them to share their knowledge. Lastly, it was shown that there is a lack of support in terms of KS from the LIS' management team, and that this group has a larger role to play in the LIS' KS endeavours. In the next chapter, the researcher will discuss and summarise these findings and give recommendations based on the findings.
CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The aims of this study were to analyse KS practices at a library within the LIS of a higher education institution in South Africa. The researcher collected qualitative data and analysed it according to the guidelines discussed in Chapter Three. The findings we analysed and presented in Chapter Four. This chapter is dedicated to drawing conclusions and outlining interpretations from the data presented in Chapter Four. The researcher will make recommendations based on the research findings and also suggest possible future research activities.

5.2. Summary of the findings

In this section, a summary of research findings will be detailed, based on the four focal areas of the research which were: KS; KS culture; possible barriers and potential drivers to KS within the LIS; and the role of the LIS’ management in the promotion of KS.

5.2.1 KM and KS

- The majority of respondents had a general idea of what KM entailed, even though they did not provide an accurate word-for-word, theoretical definition. The respondents recognised the key issues in KM and that the sharing of knowledge could potentially set the LIS apart within the institution and assist the institution in reaching its goals. Additionally, respondents noted that KM could aid in creating value within the institution and could allow continuity of work processes. Furthermore, it was found that KS would cultivate relationships between the different LIS libraries and their clients, enabling a higher level of service delivery.

- It emerged from the data that the LIS did not have a formal KS policy and more than half of the respondents voiced a need for the LIS’ management to promote KS more actively. These respondents believed that the LIS’ management contributed to LIS employees choosing to hoard their knowledge.

- The majority of respondents believed that a silo culture was prominent within the LIS, among different sections within the libraries. These respondents noted that KS within the LIS did not typically occur across library sections, but mainly transpired between individuals within their own sections. It became evident that the LIS lacked collaboration between library sections, even though most of the
respondents were in agreement that the work they did related to work done in other sections, in the end.

- Furthermore, it emerged that there was in fact a certain level of KS among staff members within the LIS, but that the KS was informal and limited to ISS. The majority of respondents agreed that ISS were ineffective as a vehicle to drive KS in the library and that other avenues of KS should be investigated.

5.2.2 Knowledge sharing culture and the role of the LIS’ management

- Most respondents believed that, for knowledge to be shared successfully within the LIS, the LIS’ management needed to increase their involvement in the notion of KS. The respondents indicated that the LIS' management should be involved in the idea of KS from start to end: from promoting a KS culture, to enabling employees to share their knowledge by supplying tools and encouraging KS mechanisms. The majority of respondents were of the opinion that the current LIS management team were not doing enough to drive KS within the LIS, and that this lack of commitment lead to the demise of KM mechanisms, such as ISS, which did exist in the past.

- The study also revealed that senior staff members felt that they could most likely not learn much from junior staff members and thus KS, making it clear that KS is typically only shared in one direction: from the top down. Both junior and senior staff members seemed to have a somewhat guarded attitude when it came to sharing knowledge. Seniors staff members believed that they had a lot to offer in terms of knowledge to share, and described junior staff members as unwilling to learn. Junior staff members in turn, felt that they were not being listened to by senior staff members.

5.2.3 Drivers and barriers to knowledge sharing

- Respondents listed various reasons why they believed LIS employees chose not to share their expertise within the LIS. The main reasons listed by respondents were insecurity and self-interest. The belief among most respondents was that, if one shared their expertise, their jobs would become redundant and they might risk losing said job. Furthermore, the certain respondents believed that a person who is selfish, will most likely not share anything with anyone. In terms of insecurity, some respondents mentioned the pressure of being expected to present their knowledge during ISS, especially if the audience during such a session was senior to what they as presenter was.
• It also emerged that the LIS encouraged specialisation of tasks, where only certain individuals were experts in certain fields. The majority of respondents noted that the culture within the LIS and the actions of the LIS’ management, ensured a propensity to create champions whose territories within certain fields of expertise, were safely guarded.

• The LIS did not have a reward or incentive system for KS. Most respondents believed that incentives and rewards were necessary to encourage personnel to share their expertise and know-how. They identified incentives and rewards such as recognition or appreciation, an employee of the month award, and monetary handouts as suggestions in this regard.

5.2.4 Knowledge sharing tools and mechanisms

• The LIS had various ICT tools and certain KS mechanisms at their disposal to share knowledge. These were however not traditional KM and KS tools, but were being applied for this purpose as alternatives. Considering that the LIS made use of general applications such as email and social media to share their expertise, it did not surprise that most KS took place informally. All respondents listed specific tools and mechanism that they perceived as being used for KS: Email, meetings, groupware, the library newsletter, social media, interest committees' meetings, and ISS. Many of the respondents indicated that non-traditional tools and mechanisms were being used informally to share knowledge, due to a lack of financial and human resources dedicated to KM and KS.

5.3. Recommendations

In this study, various factors that affected KS at the main library within the LIS of this particular higher education institution, were identified. In the following section, recommendations arising from the findings of the study are made.

I. It became evident that there was some level of KS at the LIS, yet it was limited to ineffective ISS. It is recommended that the LIS focused on a formalised strategy around the inclusion of KS, through KM, within its libraries. This will imply that engaging conversations between LIS employees and its management should discuss and agree on committing to deliberate KS activities, enable through the necessary tools and mechanisms.

II. LIS management needs to commit themselves to promoting KS within the LIS, on all levels. This can be achieved through encouraging and supporting the
creation and sharing of knowledge within the LIS. By motivating employees within the LIS to continuously learn, both formally, individually and from each other, the LIS' management can play an active role in building and sustaining a KS culture within the LIS. With such a culture, KS groups such as CoPs are likely to form and the KS culture will become not only sustainable, but an integral part of the LIS' success within the larger institution.

To encourage the growth of a KS culture, however, the management of the LIS need to lead by example. KS initiatives should not only be planned on paper, but brought to fruition, by being actively encouraged and constructively managed.

III. It is further suggested that the LIS should benchmark itself against similar departments within other South African higher education institutions, in order to remain competitive in terms of skills building.

IV. It became evident that the LIS did not have financial resources available to invest in KM or KS support tools, technologically speaking. It is suggested that the LIS explores inexpensive or even free collaboration tools, available online. Such tools can be used to allow colleagues and clients to find answers to common work and LIS related questions.

The LIS can also make use of the existing intranet platform, which is not currently utilised. The intranet can be used by the LIS to create a repository of best practices and other valuable explicit knowledge sources.

V. In order to motivate KS, it is strongly suggested that the LIS considers the issue of incentives and rewards for effective KS activities within its libraries. Currently, there is no rewards system in place for KS, however, the LIS can start small with recognition and perhaps rewarding effective knowledge sharers with hours off. Once a formal KM and KS policy allows for the allocation of resources to these activities, the LIS can consider instating monetary rewards as incentives. It is important to note, however, that the policies should be clear regarding guidelines around what constitutes effective KS and what is implied with regards to quality in terms of the knowledge being shared.

5.4. Possible future research areas

As noted in Chapter Three, this study was limited to only one library within the LIS. The researcher proposes that this study be extended to the other LIS libraries and that the findings should be compared and consolidated in aid of drafting KM and KS policies.
Furthermore, the researcher proposes a study focusing on the silo approach identified within the LIS in terms of KS. Such a study can determine the flow of knowledge within the LIS, in order to propose suitable ways to overcome this limiting phenomenon.

5.5. Conclusion

The aim of this study was to analyse the KS practices at a library within the LIS of a higher education institution. It was evident from the study that the employees at the LIS saw knowledge as an important asset that could enable them to address, serve and meet their clients’ evolving information needs. A suggestion was also made for the LIS to explore inexpensive or free ICT tools that could facilitate collaboration and the creation of online spaces where useful and relevant explicit knowledge can be found.

It was revealed that the limited KS activities that are taking place within this library, occurred informally between individuals working within the same sections. The researcher proposed that the LIS prioritises the drafting of a KM policy and strategy to formalise matters around the concept of KM and therefore KS within the LIS, to counteract this silo way of functioning. The study revealed that KS activities within this LIS library were suffering due to a lack of leadership support. The general belief among respondents was that the current LIS management team was not encouraging a KS culture or the use of previously successful KS mechanisms.

A proposal was for the management of the LIS to motivate employees to develop themselves and through formal qualifications as well as joining in some of the LIS’ interest groups. A prominent finding of this study was that respondents were optimistic about the idea of incentives or rewards for effectively sharing their knowledge. This in itself could be a valuable course of action for the LIS’ management to explore.


APPENDIX 1: LETTER OF INTRODUCTION AND INTERVIEW

SCHEDULE

Letter of introduction

Purpose of the study: To explore the knowledge sharing practices within an organisation’s information services division.

Name of researcher: Jabu Radebe

Dear Respondent

I am conducting a study for the degree Master of Commerce Business Management: Knowledge Management at the University of Johannesburg on "Knowledge sharing practices within an organisation's information services division". As one of the VUT Library Personnel, you have nominated to partake in this study and you are thus requested to sit in an interview which will last for about 30 to 40 minutes. Permission has been granted for this study to take place and the information you provide during the interview will be dealt with as confidential as possible and no content thereof shall be used to discriminate or victimise you in any way as an interviewee. The researcher further binds himself not to disclose the names of the respondents but rather to allocate a code name to each respondent ensuring their anonymity.

Your participation and time will be highly appreciated.

Thank you in advance,

Jabu Radebe
Interview schedule

A. Biographic Information

1. Position

<table>
<thead>
<tr>
<th>Executive Director</th>
<th>HOD</th>
<th>Librarian</th>
<th>Library Assistant</th>
<th>Campus Librarian</th>
</tr>
</thead>
</table>

2. Age group

| 20-29 | 30-39 | 40-49 | 50-55 | 56+ |

3. How long have you worked for VUT library (in years)?

| 0-5 | 6-10 | 10-15 | 15-20 | 20+ |

From section B to F, the researcher discussed in broad terms, an overview of the key terms/topics for each section. For instance, Section B: what knowledge management is and what knowledge sharing is before the beginning of the second session of questions:

B. Knowledge management and sharing

1. What do you understand about the term and practice of "knowledge management"?
2. Please explain the extent to which VUT library personnel share knowledge? Please give examples of typical knowledge sharing activities by VUT library personnel.
3. Will you say that there is flow of knowledge between your section and other sections in the library, for instance circulation/clients and/or technical services? Could you give an example?
4. How does the library ensure that the employee skills are shared amongst colleagues at VUT libraries?
5. In your opinion, what role (if any) does knowledge sharing play in ensuring that the library keeps up with demands and changes from client preferences?

C. Knowledge sharing culture and the role of Library Management

6. Explain how VUT library promotes the knowledge sharing culture
7. What attitudes do library staff members usually have towards sharing knowledge with either their peers (same level), or colleagues more junior or senior to them in the hierarchy? How does this influence knowledge sharing, in your opinion?
8. Is Library Management committed to promoting knowledge sharing amongst colleagues? Please elaborate on your answer.
9. How does library management ensure that colleagues share their knowledge after attending conferences and skills development workshops, e.g. LIASA or SAOUG Conferences/Workshops?
10. Do you as an individual believe in sharing your expertise, skills or knowledge you have gained through years in your position?

D. Drivers and barriers to knowledge sharing:
11. In your time working within VUT libraries, what would you say leads people to choose not to share their knowledge?
12. Do you think that giving incentives or rewarding people will encourage more people to share knowledge? If yes, what incentives or rewards were given to people for sharing their knowledge? If not, please elaborate more on why incentives and rewards will not encourage people to share more.

E. Knowledge sharing tools and mechanisms:
13. Please list any knowledge sharing tools at your disposal in the library.
14. Do you have the adequate skills necessary to use these tools?
15. Which of these tools do you use and why do you prefer to use the ones you have listed?

F. General:
16. Is there anything that you would like to add in terms of a knowledge sharing culture at the VUT libraries?
APPENDIX 2: EXAMPLES OF DATA ANALYSIS TECHNIQUE

<table>
<thead>
<tr>
<th>Explain how VUT library promotes the knowledge sharing culture</th>
<th>Interview 1</th>
<th>Library management enforced this by making us meet and share knowledge through information sharing sessions after a person have attended a workshop or conference.</th>
<th>Information sharing sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 2</td>
<td>Library management is not promoting the culture of knowledge sharing rather colleagues share informally on their own.</td>
<td>Lack of leadership-promoting share informally</td>
<td></td>
</tr>
<tr>
<td>Interview 3</td>
<td>It is not applicable because there is nowhere where someone called me to office to share his/her expertise about what is happening in the library.</td>
<td>Not happening</td>
<td></td>
</tr>
<tr>
<td>Interview 4</td>
<td>Used to do it through information sharing sessions, I wish I knew what stopped it. Maybe because we do not have an executive director and acting managers are unable to enforce such practices.</td>
<td>Information sharing sessions, lack of leadership</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Too many red tapes on the library. But for the fact that they brought us and appreciated us then I will go and come back and five share my knowledge.</th>
<th>Interview 2</th>
<th>It is not about incentives to ensure that the library operates smoothly. So people usually don't have problem sharing rather limitations by management.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 3</td>
<td>Even though management can give us something, it will in the long run depend on the person's willingness to share. It will again apply to people who are confident and comfortable to share.</td>
<td></td>
</tr>
<tr>
<td>Interview 4</td>
<td>Yes, I am improving my education, recognitions and promotion will do.</td>
<td></td>
</tr>
<tr>
<td>Interview 5</td>
<td>None existent incentives. Recognition will work as a motivator. The only knowledge sharing happening is</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Director and thus resulting in lack of leadership in the library.</th>
<th>Interview 14 (20)</th>
<th>Library Orientation information sharing sessions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview 15 (21)</td>
<td>Formal Meetings, Information sharing sessions, emails, telephones, informal debates.</td>
<td></td>
</tr>
<tr>
<td>Interview 16 (22)</td>
<td>Through web conferences for satellite campuses. Through Intranet for main campus. Through staff meetings.</td>
<td></td>
</tr>
<tr>
<td>Interview 17 (90)</td>
<td>We give out knowledge we talk about information in our department, we have meetings and then we share the knowledge with others the rest of the library. I also receive a lot of emails which have the lots of information then I forward with others AND we share with others via e-communication and the library newsletter. If we have meetings, emails</td>
<td></td>
</tr>
</tbody>
</table>

| Information sharing sessions library orientation | Intranet Web conferences Staff meetings | Meetings, emails |
APPENDIX 3: PERMISSION TO CONDUCT THE STUDY

Research and Innovation Ethical Clearance Certificate

Applicant: J Radebe (MCom)
Project: Business Management specializing in Knowledge Management
Institution: Vaal University of Technology
Date Approved: 5 September 2016
Ethical Clearance Number: ECN12-2016
Approved: Yes/No

UNIVERSITY OF JOHANNESBURG

Date: 8 September 2016

Research Directorate
Private Bag X 024
VANDERLIJPARK
1500
Vaal University of Technology
APPENDIX 4: LETTER OF INFORMED CONSENT

CONSENT FORM

<table>
<thead>
<tr>
<th>Study</th>
<th>Knowledge sharing practices within an organisation’s information services division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>MCom Business Management with specialisation in Information and Knowledge Management</td>
</tr>
<tr>
<td>Faculty</td>
<td>Faculty of Management</td>
</tr>
<tr>
<td>Objective</td>
<td>To obtain consent from research respondents in writing</td>
</tr>
</tbody>
</table>

I, the undersigned, (Prof / Dr / Mr / Mrs / Ms) ______________________________ hereby indicate that I have read and understand the conditions set out below for the participation in the abovementioned research. I hereby give permission to Mr Jabu Radebe, that he may conduct interviews for data collection, given the following conditions of participation:

- Respondents will at all times be fully informed about the research purpose and process; interview questions will be provided to respondents in advance.
- Interviewees have an option to either participate by providing answers to questions in MS Word format, emailing their responses to the researcher; or, by appointment, participate in a 30-45 minutes face-to-face interviews.
- Face-to-face interviews will be recorded on an audio recording device and the researcher undertakes to store the data (recordings and email responses) in a secured environment.
- Participation is voluntary and opportunity to comment on the findings from the interview will be afforded to respondents as well as the right to withdraw from the study at any time, without any pressure to provide reasons.
- All possible means will be taken to ensure that respondents are not caused any harm by partaking in this study, a pseudonym will be allocated to respondents to protect their identities and to guarantee that any information revealed, either personal or professional, will be regarded as confidential.
- Respondents will not be exposed to any acts of deception or betrayal in the research process or its published outcomes; faithfulness, keeping of agreements and loyalty in personal relationships are central to the reputation of the researcher, the research supervisor and individual respondents.

_________________________________________  __________________________
Signature: Interviewee     Date

____________________________________________  ___________________________
Signature: Researcher     Date

_____________________________________________  ___________________________
Signature: Supervisor      Date