

# **Knowledge sharing practices in academic libraries with special reference to the Unisa Library**

**By**

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## **ABSTRACT**

In recent years it has been acknowledged that the practice of knowledge management can play an important role to ensure an organisation's competitive edge within an industry. This study focuses on knowledge sharing practices in university libraries with special reference to the Unisa Library. The aim of the research project was therefore to establish whether the Unisa Library is receptive to knowledge sharing practices, whether there is a need for knowledge management and more specifically for a knowledge sharing strategy. Thus the objective was to establish the extent to which knowledge sharing practices occur among professional library staff, albeit unknowingly, in their daily activities.

The study employed both quantitative and qualitative research approaches. A questionnaire was delivered in person to professional librarians while interviews were conducted with managers from the various directorates of the library. The questions explored the knowledge sharing practices, including challenges within the library. They were based on internationally accepted knowledge management themes which include the role of leadership, organisational structure, organisational culture, technology, processes in enabling the effective practice of knowledge management. General themes such as incentives and barriers towards knowledge sharing were further also explored.

The results of the study revealed that knowledge sharing does occur in the library, albeit mostly in an informal way. It, however, was also evident that there were a number of challenges and barriers that acted as an impediment to successful

knowledge sharing practices. These include the fact that the library lacks a clearly defined knowledge sharing strategy. Furthermore, the organisational structure, organisational culture, and certain processes did not allow for easy sharing of knowledge among professional librarians.

Recommendations on how these issues can be addressed were also provided. The researcher therefore proposed a road map that outlined the steps that should be followed to attain a satisfactory level of knowledge sharing at the Unisa Library as well as an environment where there is an open transfer of knowledge from experts to the less knowledgeable. It was further argued that for this to succeed, senior management would have to promote the process and outline the importance of knowledge sharing activities for the Unisa Library. It was further suggested that incentives should be instituted to ensure effective knowledge sharing.

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# CHAPTER 1: INTRODUCTION

## 1.1. Background to the research problem

In recent years knowledge management (KM) has become an important tool that ensures that organisations operate at a high level of effectiveness (Hislop, 2013:2; Ibrahim & Reid, 2009:1). Knowledge provides both profit and non-profit organisations with a competitive edge to survive within their environments. The value of knowledge in any organisation can therefore never be underestimated and it is argued that this crucial resource should be effectively managed.

Academic libraries form part of the global knowledge economy and are therefore among those organisations that need sound knowledge management policies in order to survive in the current era of the information superhighway. With the advent of advanced technological innovations coupled with the emergence of information users that are technologically literate, academic libraries have had to change the means and ways they provide information and services to their clients. A further factor that academic libraries have to consider is that, because they serve tertiary institutions which in turn form part of society, they have a duty to provide a service to their clients (academics and students) that would enable them to conduct relevant research that will benefit society at large (Maponya, 2004: 1).

According to Jantz (2001: 34) KM is not a concept that is commonly used in libraries, because of the assumption that it relates to business value in terms of profits. Jantz (2001: 35) further states that most academic libraries lack a 'systematic approach' to capturing, organizing, storing and sharing all forms of organisational knowledge. It is

argued that service delivery could be significantly improved if librarians were to apply knowledge management practices to not only create, acquire, organize, store, and disseminate information, but also to share tacit knowledge that resides within individuals. This would better enable them to render a relevant, meaningful and effective service to their communities (Sarrafzadeh, 2005: 95).

## **1.2. Problem statement and objectives of the study**

Most academic libraries in South Africa are aware of the changing environment and have, notwithstanding challenges, taken a leading role with regard to the acquisition and dissemination of information. This has been in response to the change in the way information is currently presented, which in turn is a result of the proliferation of various online, or electronic information sources, as well as telecommunication technologies. The changing characteristics and nature of the modern day client has also required that academic libraries review and revise the way they operate. Library clients have become more independent and usually need electronic contact with the library while simultaneously requiring academic librarians to provide prompt assistance.

The Library of the University of South Africa (Unisa), in addition to the challenges mentioned above, has to contend with the complexities that derive from the fact that it is an Open Distance Learning (ODL) academic institution that serves a vast number of clients from all over Southern Africa and even globally. The student enrolment alone surpasses three hundred thousand and its library is the largest in Africa with over 2.7 million items in stock. The aim of the university is to provide an equally high level of

service to every member of the university community regardless of their geographical area and the implications of massification<sup>1</sup>. The Unisa Library therefore faces a challenge of adapting its services to the ODL principles that the institution subscribes to. Thus, the Unisa Library has to ensure that it is able to meet the demands and needs of all categories of clients, i.e. ranging from those that are technologically challenged and who reside in remote areas of the world to those that are technologically literate and live in closer proximity to the main library. It is, therefore, argued that the Unisa Library and its librarians need to not only have a thorough understanding and awareness of these changes in the information environment, but also be aware of how to effectively use KM tools in the library to facilitate knowledge exchange. Thus, these KM tools would ensure that tacit knowledge buried in the minds of more experienced personnel as well as explicit knowledge that has been captured and stored in repositories, databases and various online resources, is shared and further that the knowledge that staff have is not lost when they retire or leave the library.

In summary, the problem that motivated this research project was whether there is a need for effective knowledge sharing among library staff at the Unisa Library to improve service delivery. This further led to the following sub-problems that require investigation:

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<sup>1</sup>Optimal utilization of space, student accommodation, maintenance of physical facilities, etc., all of which relate directly to the *massive* increase of student enrolment, or *massification*

- what is the current status of knowledge sharing at the Unisa Library;
- whether the Unisa Library is receptive to knowledge sharing tools and techniques; and
- whether there is a need for knowledge sharing policies and strategy as part of the library's strategic plan.

Thus the main objectives of the study were to:

- discover to what extent the library staff utilizes knowledge sharing tools, albeit unknowingly, in their day to day activities;
- identify knowledge sharing tools currently in use in the Unisa Library;
- ascertain from the middle managers from the various divisions of the library if they believe that the librarians possess the required competencies to enable them to integrate knowledge sharing practices in their work processes;
- establish if the staff are aware of the benefits of implementing knowledge sharing practices.

Therefore, the ultimate aim of this research project was to create awareness and encourage the use of knowledge sharing tools in the Unisa Library to further improve information services to all clients.

### **1.3. Research questions**

The main research questions that were developed from the research objectives and problem statement to direct the study are as follows:

- Are the Unisa librarians aware of the existence and benefits of knowledge sharing practices?
- Do the Unisa library staff have a knowledge sharing culture?
- Does the library's infrastructure provide an enabling environment for knowledge sharing?
- Does the library capture and store the knowledge of its staff?
- Do the middle managers believe that the librarians have the competencies necessary for them to apply knowledge management tools in their sections?

#### **1.4. Research methodology**

To achieve the objectives of the study and investigate the research questions set, the researcher decided to conduct a knowledge audit wherein knowledge sharing would be investigated at the Unisa Library. The study utilized a mixed methods approach by combining quantitative and qualitative methods in the data collection process, i.e. a questionnaire was administered to a sample that comprised of professional library staff, as well as in-depth interviews that were conducted with the middle managers from the various sections of the library. The objective was to make use of the advantages as well as the benefits of both these research approaches. An introductory letter explaining the purpose and time limitations of the study accompanied the survey questionnaire.

## **1.5. Significance of the study**

The research project intends to contribute towards the broad field of KM in academic libraries, and more specifically the area of knowledge sharing in such libraries which, according to Liu, et.al (2010: 456), has not been researched to any extensive degree.

The same sentiments are echoed by Sarrafzadeh, Martin, & Hazeri (2010: 198);

“Although there are some indicators of involvement of libraries in KM in published case studies (through activities such as development of intranets and institutional repositories of content management and embedding information literacy instruction in the curriculum and employing web 2.0 technologies for knowledge sharing), libraries are still in the early stage of understanding the potential implications of KM”.

Little research has been done over the years, especially in South Africa, about knowledge sharing practices in academic libraries and more specifically the use of knowledge management tools to ensure that knowledge that exists within individuals is shared among the staff of the library. Thus, the aim of the study was to increase awareness of the importance and benefits of using knowledge management tools, and more specifically the value of knowledge sharing in an academic library, and consequently the need to incorporate a KM strategy in the Unisa Library strategy.

## **1.6. Scope, Limitations and Delimitations**

The study was confined to the Unisa Library as the researcher is currently employed by this library and would therefore like to make a meaningful contribution in terms of increasing awareness of the value that could be derived from applying knowledge

sharing practices in this library. It is argued that by increasing such practices service delivery could be significantly improved. Data was collected from the middle managers from the various sections of the library and a sample of professional librarians within those units.

## **1.7. Organisation of the study**

The dissertation has been organized into five main chapters as follows:

### **Chapter 1: Introduction**

The **first chapter** provides an introduction to the dissertation and consists of the background to the research problem, the problem statement, objectives of the study, the research questions, brief outline of the research methodology, the significance, scope, limitations and delimitations of the study.

### **Chapter 2: Literature review**

**Chapter two** contains the literature review which covers an overview of knowledge management including knowledge sharing in organisations in general and academic libraries in particular. The benefits and barriers towards a successful knowledge sharing culture are also discussed. The chapter further deals with the importance of knowledge audits in organisations.

### **Chapter 3: Research methodology and design**

**Chapter three** outlines the research design and methodology used in the study which comprised of an overview of the research design, the population and sample, the sampling procedures, the research instruments, validity and reliability, and data collection procedures.

#### **Chapter 4: Data analysis**

The **fourth chapter** presents the analysis of the data that were obtained during the data collection phase as well as the discussion of the findings. Data were collected via a questionnaire from librarians and interviews with middle managers at the Unisa Library.

#### **Chapter 5: Conclusions and recommendations**

**Chapter five** covers the conclusions, recommendations, and suggestions for future research.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1. Introduction**

This chapter outlines the literature review that supports the study of knowledge sharing in academic libraries. An overview of knowledge management is given with the concept of knowledge explained including an explanation of the distinction between tacit and explicit knowledge and their importance in an organisation. Other important topics discussed include an outline of the important role of the human factor insofar as knowledge management is concerned, knowledge development, knowledge sharing in organisations in general and in academic libraries in particular, as well as the rationale for conducting a knowledge audit.

### **2.2. Knowledge management – an overview**

Knowledge management (KM), although practiced intuitively from time immemorial, is a fairly new concept that evolved in the late 1980's. This new paradigm has been brought about by the realization that for any organisation to succeed, well managed knowledge-related processes are necessary. As Drucker (1998: 2) put it as far back as 1998, "in future all organisations will be knowledge based". In other words, obtaining and utilising information and knowledge from all players in an organisation, viz. management, employees as well as clients / customers will be of utmost importance. Gonzalez (2002) claimed fairly recently that KM is already considered to be an important practice among a number of organisations. She goes on to describe it as "a discipline designed to harvest, re-use and extend an organisation's

knowledge". In fact, she maintains that organisations that have adopted KM practices will certainly grow in the era of global competition. This, she says, is evident if one looks at the world's top 12 largest firms of which most of them attribute their success to the implementation of KM systems.

Gonzalez, however, also points out that despite the clear benefit of implementing KM, many organisations around the world still doubt the necessity of having sound knowledge management practices (Gonzales, 2002). According to Mårtensson (2000: 204) even organisations that recognize the value of KM have not started to implement it. Although senior management are usually aware of the importance of KM in relation to the success of a company, they often do not know what to do. This was shown, for example, in a survey of 40 companies in Europe, Japan and the United States of America, where most top managers believed that KM begins and ends with the construction of complex information technology (IT) systems. In other words there is a general lack of awareness of the fact that rather than merely implementing technology solutions, organisations would derive far more benefit from ensuring that they create an organisational culture and an environment that encourages a desire for knowledge among employees (Hauschild, Licht & Stein, 2001: 74). In fact, Malhotra (2000: 1) maintains that some technology experts as well as academic scholars have disputed any possibility of a direct relationship between investing in IT and KM. Skyrme (2001: 25) also maintains that although KM has been widely adopted, very few organisations have incorporated it fully as part of their business processes and management decisions. He further states that organisations that have recognized the

value of KM have initiated the process by using knowledge for the improvement of their internal processes which has resulted in better products and services rendered.

According to Wagner-Dobler (2004: 39), organisations can be guaranteed a competitive advantage in the market place if they effectively leverage and use knowledge, whether tacit or explicit knowledge. As Kuhlen (2004: 21) puts it, KM is a means of “having better control over the production and usage of explicit and implicit knowledge in organisations of any kind”

### **2.3. What is knowledge?**

Knowledge has become the most significant resource that ensures the survival of organisations in the current knowledge economy. Nonaka (1991: 96) was probably the first person to state that knowledge is the only certain source of “lasting competitive advantage” (see also Wagner-Dobler’s comment above). This he attributed to the uncertainty that generally exists in the global economy with the fast changes in technology, the increasing number of competitors and the instability of markets.

According to Henczel (2004: 92), defining knowledge is not easy because it integrates many components such as experience, intuition, judgement, skills as well as lessons learned. Lee (2003: 43), however, states that the definition of knowledge is often approached by describing the distinction between data, information and knowledge. Data can be described as simple, discrete facts and figures such as names, characteristics and numbers. Suurla, Markilla, & Mustajavari (2002: 35), in turn, refer to data as “codes, signs, and signals that do not necessarily have any significant

meaning”. In other words, data are simply a collection of facts that have no meaning. Once this data is organized, patterned, grouped and categorized it becomes information. Information, therefore, is data that has been organized for a meaningful purpose. For instance, data may be in the form of a table of statistics, but once those statistics have been arranged and organized in a meaningful way to describe and portray a phenomenon, then it becomes information.

The definition of knowledge is much more complex and it originates in the minds of human beings (Lee, 2003: 45). Knowledge can also be embedded in organisational practices, routines, and processes. Organisational repositories also store knowledge, hence the concept of explicit knowledge and information. Semertzaki (2011: 64) echoes the same sentiments. Thus, she advocates that knowledge is captured by collecting information which the human mind absorbs and then converts into knowledge. She further states that “knowledge is what the knower knows, whereas information is codified”.

Knowledge is constantly being created by employees as they do their jobs, which therefore makes it difficult to capture and organize. Some of the knowledge can be expressed, captured, stored and therefore made accessible for re-use while much of it is never articulated and remains in the mind of the ‘knower’. These types of knowledge are known as explicit and tacit knowledge respectively.

### **2.3.1. Explicit knowledge**

Skyrme (2001: 7) defines explicit knowledge as “that which can be codified, such as in documents and databases”. Capurro (2004: 48) refers to explicit knowledge as ‘information’; which is often found in a digital format. (Nonaka & Toyama, 2003; Grover & Davenport, 2001) also state that explicit knowledge can be expressed through the spoken and written word, as well as by means of drawings and art. This kind of knowledge is universal in nature, in other words explicit knowledge is recorded knowledge (Nonaka & Von Krogh, 2009; Chow & Chan, 2008; Davenport & Cronin, 2000). Therefore, explicit knowledge can easily be articulated, communicated and codified (Grover & Davenport, 2001; Abell, 2001).

According to Sunassee & Sewry (2003: 25) the main characteristic of explicit knowledge is that it can be easily disseminated through different formats since it is formal and systematic. In addition to that it is easy to articulate and capture. Thus as Dillon (2007: 32) maintains, this is the type of knowledge that is found in libraries.

### **2.3.2. Tacit knowledge**

According to Wagner-Dobler (2004: 40), the concept of tacit knowledge was first used by the Hungarian-British physicist and philosopher Michael Polanyi (1891-1976), who believed in the existence of a kind of knowledge that does not depend on well-known conventional forms of knowledge like definitions, observations, and logical conclusions. Instead this knowledge “rests on unapproved assumptions and

internalized practices which are unformulated, not explicit and often unconscious, but of crucial importance for gaining scientific knowledge” (Wagner-Dobler, 2004: 41).

The concept of tacit knowledge was further developed by Nonaka and Takeuchi in the mid-nineties which they adapted for business application. With this in mind, tacit knowledge became known in organisations as that type of knowledge that is not documented but is buried in people’s minds (Skyrme, 2001: 135). Wagner-Dobler (2004: 42) further asserts that generally people possess far more knowledge than what they can ever record and that the knowledge they share with others is done so by various means such as:

- personal conversations, and informal communication,
- storytelling, and,
- observation and imitating.

Abell & Oxborow (2001: 56) further expand on the definition of tacit knowledge and state that it is the distinctive combination of an individual’s experience, knowledge, and expertise that enables them to make a meaningful contribution towards the success of the organisation. In other words, the route which an individual takes to

- make a particular decision,
- arrive at a particular conclusion,
- place a particular interpretation on a piece of information, and,

- make the decision to go about a task in a particular way

is all part of their experience, skill, and expertise. Thus, tacit knowledge is “tied to the senses, tactile experiences, movement skills, physical experiences, intuition, unarticulated mental models, or implicit rule of thumb” (Nonaka & Von Krogh, 2009: 635). In essence, as Erden, Von Krogh & Nonaka (2008: 9) put it; tacit knowledge “is bound to people”.

#### **2.4. The human factor**

It is argued that there is no point in mere acquiring new knowledge, it must subsequently also be applied. According to Hauschild, Licht & Stein (2001: 71), almost all organisations have vast storehouses of knowledge, of which much is underused. Companies usually do not know how to go about applying the knowledge they or their staff have acquired. They further suggest that in order for an organisation to ensure that effective knowledge application takes place it should create the right organisational culture that encourages interaction amongst employees and that this should involve bringing together people from different levels in the organisation. Thus discussion or rather interaction between the management and the rest of the staff should be encouraged. In this way different ideas are generated and then adopted while still adhering to the principle of working towards achieving a common goal. In addition, due to the interaction, people develop different skills and are also able to measure their performance and level of expertise through their continuous contribution to the organisation. In all, people learn from each other.

Technology can further be used effectively to ensure that knowledge application can also occur across different organisations that deal with totally different products. However, in such instances differences in business experience as well as in culture should be considered, and ideas should be adapted to suit the needs of a specific organisation or a particular process or product. For example, a California construction company managed to raise its rate of online deliveries to a remarkable 95 per cent by taking route-planning lessons from a local pizza delivery company (Hauschild, Licht & Stein, 2001: 79).

Nonaka, Von Krogh, & Voelpoel (2009: 1179) believe that the creation of organisational knowledge comprises of making available and intensifying knowledge created by individuals, as well as well as shaping and linking it with the organisation's knowledge system. Thus "what individuals come to know in their work-life benefits their colleagues, and eventually, the larger organisation". Hauschild, Licht & Stein (2001: 79), however, emphasize that organisations should always be aware of the fact that the most difficult knowledge to leverage, share and manage is tacit knowledge, i.e. that which is embedded in the minds of the employees.

Malhotra (2000: 31) agrees with these cautionary words and he thus stresses that human capabilities are required to make individuals want to extract the knowledge they have and share it with others. Successful companies are good at managing this process and encouraging knowledge sharing. He refers to the instance where a global company decided to send designers of a product to the shop floor to supervise the actual production of the product. This subsequently opened the lines of communication between the designers and developers of the product and the

assembly line employees, which actually helped because the developers were in a position to gain better insight into production problems. Obviously, the interaction improved relations between the two groups since there was an exchange of tacit knowledge between them, which would normally not have existed had the developers not been involved in the actual production of the product. The exercise consequently led to the success of the company. Thus, “economizing human capital and the knowledge embedded in it is a trend which cannot be overlooked” (Wagner-Dobler, 2004: 39)

## **2.5. Knowledge development**

Knowledge development is a concept that relates to the development of the conceptual, behavioural and technical abilities of an individual. Such development requires a structural competency based learning that is aimed at ensuring an overall competency of employees in an organisation (Rowley, 2000:9). In other words, organisations should be competency driven so as to bring about a high level of competency among employees in an organisation.

To succeed in the competitive global world, organisations should become what are called learning organisations. A learning organisation is defined as “an organisation skilled at creating, acquiring, and transferring knowledge and insights” (Garvin; 1998: 51). Thus ideas which can either come from within or outside the organisation itself are essential for learning to take place. Garvin further (1998: 52) outlines the main

activities that he suggests are the building blocks of learning organisations and which provide effective learning. These are discussed in the following paragraphs.

The first activity is systematic problem solving, which relies on the scientific method to identify and solve problems. This means that data and not just assumptions should be used as a background to make decisions. In other words, decisions should be based on information that already exists within or outside the organisation. Thus, employees should be taught to become aware of what goes on around them.

Experimentation is another essential activity for a learning organisation. This involves the searching for and in turn testing of newly acquired knowledge. For instance, employees could be involved in ongoing test programmes that seek the best way to achieve the highest level of performance of a particular task in an organisation. However, there is also what is called demonstration projects or experiments. Such projects are usually built from the beginning as a result of a need for change in a particular area in the organisation.

Organisations must also continuously review their successes and failures and assess them systematically so that they form a basis for their future performance. There is a lot that can be gained from past failures despite what most people might think. Thus, learning from past experiences is very important for the success of an organisation. Most organisations learn from past failures by closely examining the causes and in turn avoiding them in the future (Garvin, 1998: 62).

Learning from others is also very important. This means looking beyond one's confines to outside the environment in order to gain a new perspective. Sometimes

organisations can even learn from other organisations that are in completely different businesses (Garvin, 1998: 64). A good example is that of a California construction company that managed to improve its rate of time deliveries by taking route-planning lessons from a local pizza delivery company (Hauschild, Licht & Stein, 2001: 79).

The last building block mentioned by Garvin (1998: 66) is the concept of transferring knowledge. For efficient learning among employees to take place, the organisation should devise means to ensure that new knowledge is disseminated as quickly and as efficiently as possible throughout the organisation. This can be done in a variety of ways, e.g. through written, oral, and visual reports, and also through site visits, tours, and education and training programmes. Personnel rotation programmes are also regarded as one of the most powerful methods of transferring knowledge, since the individual is actively involved in whatever they are supposed to learn, unlike reading written or visual reports, or even going on tours, where an individual can only learn in a passive manner.

From the above it is clear that it takes time for an organisation to develop into a learning organisation. Be that as it may, the fact that knowledge organisations take time to build can never be over stressed.

## **2.6. Knowledge sharing in organisations**

Von Krogh, et.al. (2001: 21) state that organisations can only obtain a “competitive advantage and superior profitability” within their respective industries if they effectively create and share knowledge. Junnarkar (1997: 32) suggests that the most important

driver to stimulate knowledge sharing is “connecting people with people”. He goes on to say that for this to succeed, people should be able to relate at some level or another and the knowledge being shared should make sense to the people concerned so that they can use it for the benefit of the organisation. Effective knowledge sharing, results in the growth of an organisation’s intellectual capital which is “undisputedly one of the most important assets of any organisation” (Smith, 2008: 171).

In essence knowledge sharing occurs “when those with more knowledge help those with less to acquire and master it” (Dickinson: 2012: 150). Yoo & Torrey (2002: 424) believe that sharing knowledge is one of mankind’s most basic needs from childhood to adulthood. In fact it is the core factor that enriches our relationships. Despite the obvious benefits, they claim that somehow it becomes problematical when it comes to knowledge sharing in the organisational context.

Quinn, Anderson & Finkelstein (1998: 193) emphasize the value of sharing intellectual assets as they believe that, unlike physical assets, they increase in value with use. They believe that when two people share knowledge with each other they not only gain new information but also experience linear growth. But when these two individuals share this knowledge with more people the benefits are exponential. Thus organisations that have effective knowledge sharing systems gain a competitive advantage over their competitors.

Abell (2006: 57) also advocates that sharing of knowledge is beneficial to the receiver as well as the person who shares the knowledge as they become enriched in the process. Another benefit is to work on solving problems together by establishing

where the expertise is found in the organisation so that staff can tap into this expertise when solving these problems. This helps in building and spreading knowledge in the organisation. However there should be mechanisms that are put in place in order to encourage knowledge sharing; mutual trust among the staff being one of them. This according to Lawson, et. al. (2009: 160) can be achieved through the process of 'socialization', which is a mechanism by which knowledge is shared across the boundaries of the organisation. This encompasses coming up with a 'common language' and by creating a shared understanding that easily facilitates the transfer of both tacit and explicit knowledge among relevant participants. These socialization mechanisms can also help build interpersonal trust between individuals so that they can feel at ease to share the knowledge embedded within their minds. Technology usually plays a significant role in as far as the sharing of information in an organisation is concerned. For instance, the effective use of the intranet can never be overemphasized for knowledge sharing purposes within an organisation. As Van Uden (2001: 18) puts it, organisations that use intranet systems usually find it easy to conduct information audits in order to review information needs of the company and also to avoid duplication of resources. Gonzalez (2002) also agrees with the notion of employing technologies that provide structured and organised information that is easy to find and use.

However, Malhotra (2000:1) stresses that a number of technology experts as well as academic scholars have observed the lack of a direct correlation between technology and the way a business performs, and between technology and KM for that matter. He supports his statement by referring to examples of a number of industries in the

United States that have invested huge sums of money in technology in the past years but with little improvement in efficiency or effectiveness of their workers. Such failure is attributed to the fact that organisations are ignorant of means by which they could encourage better sharing of knowledge which would bring about a climate that is conducive to building on each other's ideas.

### **2.6.1. Barriers to sharing of tacit knowledge**

Kakabadse, Kouzmin & Kakabadse (2001: 148) refer to various barriers that can hinder the sharing of tacit knowledge. They suggest that there are principally four factors that can give rise to knowledge not being readily shared, namely, people, management, structure, as well as the knowledge itself. For instance with people, some of the dynamics are:

- inertia to change;
- too busy and no time to learn;
- no discipline to act;
- lack of motivation;
- constant staff turnover;
- transferring knowledge to new people; and
- teaching older employees new ideas.

Management on the other hand could create a different set of hindrances to knowledge transfer which might involve:

- the fear of giving up power;

- the difficulties of passing on power; and;
- challenging the traditional company style of doing things.

Organisational structures can also make it difficult to share tacit knowledge by being:

- inflexible;
- fragmented;
- functioning in 'silos', and;
- failure to invest in relevant systems that would facilitate knowledge sharing.

However dealing with the actual knowledge itself can have its own obstacles in that it can be difficult to:

- extract knowledge from individuals;
- categorize the knowledge;
- reward individuals for sharing knowledge;
- understand the management of this knowledge;
- ensure sharing between key knowledge groups; and
- make the knowledge widely available.

Quinn, Anderson, & Finkelstein (1998: 193) also cite professional people's reluctance to share with peers as one of the main challenges to knowledge sharing, as they regard knowledge as their 'most precious asset'. Competition among professionals regarding their intellectual contribution to the organisation is usually the main hurdle. The tendency for professionals from different disciplines to regard their field as the most important also exacerbates the problem as it deters cross-disciplinary sharing of knowledge. Quinn, Anderson, & Finkelstein further state that (1998: 194) most

professionals have little respect for those outside their field even if they all have to work towards achieving the same organisational goals. For instance, in the health care sector doctors often disregard nurses as they feel that they do not really understand the discipline of medicine as well as they do. Conversely, nurses perceive doctors as lacking true compassion while both doctors and nurses disdain administrators as they view them as 'non-productive bureaucrats'.

### **2.6.2. Organisational culture, structure and leadership**

McDermott & O'Dell (2001: 77) refer to organisational culture as "the shared values, beliefs and practices of the people in the organisation". In other words, it is how individuals in the organisation act, their expectations of each other as well as how they interpret each other's actions. Sometimes there are even further subcultures within the main organisational culture. The structure, stories and spaces also reflect the culture of the organisation.

Managing knowledge is about creating an environment and culture within an organisation that encourages the creation, sharing and transfer of information and knowledge. This requires visionary leadership and motivated staff which some organisations have ensured by involving the staff in deciding on the type of organisation they would like to be. This can be done for example, by means of brainstorming exercises. In essence the staff share knowledge about what they perceive to be best practice for their organisation and subsequently benchmark

against other organisations to identify gaps and in the end take the necessary action (Kermally, 2002: 20).

Quinn, Anderson, & Finkelstein (1998: 188) in turn state that the best organisations have leaders that are visionary and demanding. According to Schein (2004:12) leadership has a significant impact on the beliefs and values of an organisation and if what the leaders propose works and continues to work, what once were only the leaders' assumptions gradually become shared assumptions.

It is further asserted by Quinn, Anderson, & Finkelstein (1998: 188) that organisations that have generally adopted more horizontal than hierarchical organisational structures are more conducive to stimulating individual intellect and creating value from knowledge. Nonaka, Von Krogh, & Voelpel (2006: 1189) refer to such structures as 'heterarchy' organisational forms, where "assets, talent and leadership are dispersed and communication is horizontal". In such companies people get together to solve problems and in the process share tacit knowledge. The principle adopted is based on the notion that no single individual knows everything. A flexible organisational structure therefore, facilitates knowledge sharing and collaboration across boundaries within the organisation (Quinn, Anderson, & Finkelstein, 1998: 188).

Kermally (2002: 46) believes that it is the people-related or cultural issues - sometimes known as soft issues – that 'constitute an organisation's capabilities'. He further suggests that although an organisation's people should be considered as the most important asset in that organisation, the kind of leadership and culture that prevails

within the organisation should also be seen to be of vital importance. The role of leadership in organisational culture and the success of KM can therefore never be underestimated. In other words, good leadership enables and facilitates knowledge creation at various levels of the organisation. For instance, spending a substantial amount of resources purchasing and implementing technology for knowledge sharing could be perceived by staff as a sign of support from leadership. Thus, according to Conelly & Kelloway (2003: 295) perceptions about management's support with regard to knowledge sharing are essential for a progressive knowledge sharing culture to prevail in an organisation.

Conelly & Kelloway (2003: 295) further state that the benefits of a positive knowledge culture are numerous. They mention amongst others the need for frequent knowledge sharing sessions between organisational leadership and the rest of the staff. This should, however, occur without the barriers of their respective statuses in the organisation impeding knowledge exchange. If this is not ensured, employees would not become aware of their colleagues' potential for being knowledge sources. Trust is also an important factor to ensure that colleagues willingly share knowledge among each other. Thus, as Liu, et. al. (2010: 456) state, employees that fully identify with the organisation are more inclined to practice knowledge sharing.

## **2.7. KM strategy**

According to Nonaka & Toyama (2005: 424) the 'knowledge vision' of an organisation helps to give direction with regard to the creation, sharing and utilisation of its

knowledge. It also serves to stimulate the intellectual passion of individuals within the organisation so that they are encouraged to create and share knowledge. They further claim that at Honda, for instance, emphasis is put on 'the joy of buying, the joy of selling, and the joy of creating' instead of focusing on beating the competition. Thus, attention is placed on why they exist as a company in the first place and what their goal is. From this premise then, dialogues among individuals within the company are pursued and new ideas as well as new solutions to problems are accomplished. Individuals also get to learn from other people's views that are different from their own and to accept them. As Nonaka & Toyama (2005: 427) put it:

"a dialogue is an effective way to articulate tacit knowledge into explicit knowledge (externalization) and to systematize explicit knowledge, to deepen it and create new knowledge (combination). It also lays a foundation to synthesize knowledge held by organisational members, as existential contexts such as deep thoughts or emotions are shared by organisational members by engaging in dialogue".

It is, therefore, argued that organisations cannot survive in the knowledge era we live in unless they have a sound knowledge management strategy that outlines how to manage and leverage value from its intellectual assets (Haggie & Kingston, 2003: 1). According to Sunassee & Sewry (2003: 25) a KM strategy has to flow from the business strategy of the organisation which can be defined as 'a high-level, flexible plan that oversees the birth and development of a business initiative'. In other words the execution of the KM strategy must be aligned with the organisational strategy and must aim to assist in the attainment of the vision and goals of the organisation. The KM strategy must provide sufficient detail regarding the necessary processes,

infrastructure and tools to ensure the effective flow of knowledge in the organisation, as well as creating an organisational culture that promotes further knowledge creation.

A knowledge management strategy should ensure that the organisation survives external threats, works on its strengths and weaknesses, and utilises the opportunities that are available within the environment, or as stated by Nonaka & Toyama (2003: 4) it should be developed “to solve the contradiction between the organisation and the environment” (Nonaka & Toyama, 2003: 4). Thus, the aim of such a knowledge management strategy is for the organisation to achieve its goals and objectives. As Von Krogh, Nonaka & Abel (2001: 435) put it, for an organisation to achieve its goal of making the most out of its knowledge, the formulation of its knowledge management strategy needs to be aligned with all other strategizing activities within the company. They further argue that a KM strategy should be able to adapt to the dynamic nature of knowledge; i.e. the constantly changing scope and focus of knowledge domains in an organisation as time progresses. Therefore, it is imperative that the knowledge management strategy clearly outlines knowledge creation and transfer processes and that these are aligned with the organisation’s goals to ensure that the necessary resources are allocated accordingly. For instance, if an organisation is operating in an emerging industry a commitment to building new knowledge domains should be higher than if the industry is stable.

According to Von Krogh, Nonaka & Abel (2001: 427), there are four generic knowledge management strategies that can be applied with varying emphasis in all organisations, namely, the leveraging, expansion, appropriating, as well as the probing strategies.

**The leveraging strategy** is the strategy that focuses on transferring existing

knowledge throughout the organisation. Kruger & Snyman (2005: 10) concur and state that when the need for new or more knowledge is identified in an organisation the first step is to ensure that the already existing knowledge is leveraged. The aim is to increase efficiency and reduce risks in operations while ensuring that the activities are consolidated and standardized. Unilever, for instance, uses knowledge workshops to share knowledge and in the process prevent repeating mistakes while reducing the chances of 're-inventing the wheel' (Von Krogh, Nonaka & Abel, 2001: 428).

The **expansion strategy** on the other hand originates from the already existing knowledge domain of the organisation but with the intention of creating new and more knowledge both in terms of depth and scope. In the case of Unilever, for instance, new knowledge can be created by adapting existing knowledge to the cultural values and language of a specific region where a particular product is used. This strategy also helps to realize innovations in that it encourages the identification of knowledge gaps and thereby ensures that the staff find new ways and insights to fill those gaps while they accumulate competencies and skills.

The **appropriation strategy** is concerned with building a knowledge domain from external sources. These sources however must possess or contain knowledge that is of value to the organisation. Therefore, with this type of strategy the organisation must choose its partnerships strategically. Unilever's partnership with Microsoft, America Online, NetGrocer, and WomenOnline, for instance, has given the organisation an insight into how they can better interact with their clients through various online channels. This led to the creation of a new knowledge domain on e-business and business-consumer solutions, which is of high strategic importance for the

organisation. Collaborations with leading academic institutions also give them a competitive advantage as they can then acquire cutting-edge scientific knowledge that brings about radical innovations. Conversely, partnerships with existing and potential competitors also help to give organisations the edge since they gain knowledge about their strategies, the technologies they use as well as their human resources which can assist in predicting the competition's future strategic moves. (Von Krogh, Nonaka & Abel, 2001: 433).

The **probing strategy** deals with constructing a new knowledge domain from the beginning. This involves identifying a group of people that have an interest in a new idea or vision within the organisation, who will gather, and develop new information, and create new tacit and explicit knowledge for this new knowledge domain. This new knowledge is usually meant to improve the organisation's efficiency while encouraging innovation.

Be that as it may, Malhotra (2000: 199) maintains that organisations usually do not know where to start when it comes to deciding on the types of capital investments they should make with regard to knowledge. Dealing with the existing knowledge assets within the organisation is usually also a problem. In fact even senior management is often not aware of the intellectual capital within their organisations. Thus he concludes that the best way to ensure good KM practices is by means of the following three steps:

- envisioning your ideal knowledge future state ("where is the organisation going"),
- ascertaining your knowledge value propositions (why), and

- determining your knowledge management strategy.

Henczel (2004: 92) thus emphasises that the lack of a well-developed KM strategy serves as a hindrance towards the development of sound KM practices.

It is therefore argued that the long term sustainability of an organisation such as an academic library would be enhanced if it were to adopt a strong strategic plan that supports a knowledge management strategy. As Yi (2008: 230) puts it, “one of the most important duties and responsibilities of an academic library director is to provide effective strategic planning for long-term operations”. He further states that with the rapid changes and advances in technology, academic libraries have to institute strategic plans that can manage the change as well as produce plans that will meet the new demands and needs of its clients. Thus, he believes, “successful implementation of knowledge management needs a high quality strategic plan”

## **2.8. Knowledge sharing in academic libraries**

Globalization has required that universities play an important role in ensuring that they become vehicles that drive the production of knowledge. Wotherspoon (2012: 56) claims that universities are in recent times positioned to address matters that relate to knowledge-based economies that encourage knowledge and knowledge work. Knowledge work is defined as one or more of the three following elements:

- non-manual work in which core tasks involve the development, transfer or application of knowledge;

- high levels of education and specialized skills dependent, to a large extent, upon formal credentials and training; and
- immersion in a high technology environment.

Hayes & Kent (2010: 123) refer to Metcalfe's (2006) statement that universities are "obvious sites to explore the implementation of knowledge management principles in the public sector due to the connection between academia and the production of knowledge". Thus, because universities are seen as knowledge reservoirs and stimulators of the knowledge economy they are therefore required to have KM principles entrenched in their processes and culture. This, in turn, will help them make a meaningful contribution to the economic, social and cultural well-being of society.

In light of the above, academic libraries, as one of the central units of academic institutions, face the challenge of having to align their goals with the expanded role that these institutions of higher learning have adopted. Historically the value of libraries as custodians of information and knowledge has been to identify, organize, describe, and provide systems that make it easy for the university community to access this information and knowledge (Hayes & Kent, 2010: 124). However, Parirokh, Daneshgar, & Fattahi (2008: 107) advocate that academic libraries should move from playing an informational role to assuming a "resource-based and collaborative" role. This they claim will necessitate collaboration among librarians when they perform their tasks, which in essence will require knowledge sharing capabilities among themselves. Besides, with the advent of advanced technological innovations coupled with the emergence of the technologically literate information

user, academic libraries have to change the means and ways they provide information to their clients.

However, according to Sarrafzadeh, Martin & Hazeri (2010: 202) knowledge sharing activities are rather uncommon in academic libraries. In most cases, the library lacks the infrastructure that promotes effective knowledge sharing within the organisation. Wen (2005: 2) refers to Towley's (2001) view that business, corporate or special libraries are more prone to take the lead in so far as knowledge management practices are concerned. Jantz (2001: 33) believes that this can be attributed to the assumed link between the importance of KM practices and the business value in terms of profits and improved return on investment in such organisations.

Jain's (2007: 377) study of knowledge management practices in East and Southern African academic libraries revealed that only a small number of libraries incorporated a knowledge management strategy component in their library strategies. Furthermore, even though all the University Librarians - the target population of the study- who responded, professed that their libraries were learning organisations, half of them admitted to not having a culture of knowledge sharing in their libraries. Parirokh (2008: 119) agrees with Jain that academic libraries do not generally have specific knowledge management policies and strategies in place.

Similarly in a study conducted by Maponya (2004: 23) at the University of KwaZulu-Natal library it was noted that even though the staff indicated that there was some sharing of knowledge, albeit informally, there was a lack of systems that encourage

this activity. Moreover the library had no written policies or a strategy pertaining to KM activities.

Instances of the successful application of KM in academic libraries have, however, also been reported in the literature. Jantz (2001: 33) refers to a knowledge sharing initiative at the New Brunswick branch of the Rutgers University Libraries in New Jersey, United States of America. The New Brunswick Libraries consist of several smaller libraries in various locations. Their team of reference librarians decided to create a tool, known as the common knowledge database that enables the management and use of the knowledge embedded in their employees' minds. Thus the two major objectives of this database are:

- to enable the acquisition and sharing of informal knowledge in order to improve reference librarianship, and
- to facilitate, through improved communications, the organisational goal of becoming one New Brunswick library system. (Jantz, 2005: 35).

The database therefore also serves as a learning tool not only for new librarians but also for making certain that knowledge possessed by a few individuals is shared among all. The database is also updated periodically to ensure that the information remains relevant, although Jantz (2001: 39) does acknowledge that there are many challenges to acquiring, encoding, and providing tacit knowledge due to its elusive nature.

It is argued that such initiatives as outlined above have the potential to succeed provided the critical success factors that characterize sound knowledge sharing are

met, namely, trust between co-workers, communication between staff, information systems which refer to people, data and processes that interact to support daily operations, a reward system as a motivator to share knowledge, and an enabling organisational structure (Al-Alawi, Al-Marzooqi & Mohammed, 2007). For any organisation to succeed with KM it should therefore be aware of both the enablers that could assist KM implementation as well as the impediments that could abort its success. In the following Table 2.8-1 the most important enablers as well as impediments to knowledge sharing that Tiwani (2002: 60) has identified are outlined:

**Table 2.8-1: Enablers and Impediments to Knowledge Sharing**

Enablers to knowledge sharing	Impediments to knowledge sharing
High levels of trust	Fear and suspicion
Rewards for sharing	Unintentionally rewarded for hoarding
Team-based collaborative work	Individual effort without recognition and reward
Aligned mission, vision and values, and strategy	Individual accountability and reward
Joint team-wide accountability and reward	Functional focus
Process focus	Lack of alignment
Focus on customer satisfaction	Not-invented-here syndrome
Open to outside ideas	Too busy to share
Eye on competition	Internal competition
Collaborative and cross functional work	Incompatible IT
Need to share	Compartmentalization of functional groups
Localized decision making	Centralized top-down decision making
Group accountability and rewards	Employee-employer interest conflict

## 2.9. The knowledge audit

Conducting a knowledge audit is the first and most important step towards the building of a KM strategy that ensures a knowledge sharing environment in an organisation (Khatibian, N., Pour, T.H.G. & Jafari, H.A. 2010; Liebowietz, 2000; Perez-Soltero, 2009; Skyrme, 2007). It not only gives direction for the development of the KM strategy, but also helps to create awareness amongst all employees regarding the importance and value of KM and knowledge sharing (Knowledge Leadership Associates, 2012). According to Burnett, Illingworth, & Webster (2004: 25) the objective of a knowledge audit is to describe “what knowledge an organisation has, who has it and how it flows (or doesn’t) through the enterprise”.

As stated in Burnett (2004: 26), Wiig (1993) asserts that there are several signs that indicate that an organisation is in need of a knowledge audit. These include:

- information overload or lack of information;
- no awareness of the availability of knowledge or information in the organisation;
- knowledge duplication by different departments; i.e. reinventing the wheel;
- the general use of out of date knowledge with no quality or value; and
- not knowing where to find appropriate knowledge or expertise.

Thus in the end the audit will help to provide “a qualified insight” as to whether an organisation is ready to become knowledge-based or knowledge-centred. (Perez-Soltero, et al, 2006: 3).

### 2.9.1. Knowledge audit objectives

Liebowietz et al. (2000: 4) list the following objectives of a knowledge audit:

- to give a high-level view of the extent, nature, and structure of the knowledge in a specified section;
- to provide meaningful hard data input to the strategic plan for knowledge processing;
- to identify the relevant knowledge repositories within the organisation;
- to provide a statement of the qualitative characteristics of the chunks of knowledge within a particular knowledge repository; and
- to provide scientific estimates for the quantitative characteristics of the chunks of knowledge within a particular knowledge repository.

However, Burnett, Illingworth & Webster (2004: 26) argue that a knowledge audit not only assists in attaining the above objectives - which in a nutshell deal with establishing where knowledge sits in the organisation – but can also be viewed as providing a type of roadmap that sets out the route to take insofar as process improvement with regard to KM is concerned. Skyrme (2001: 13), in line with this, defines knowledge mapping as the “visual representation of core knowledge as schematic blocks showing interrelationships, for example, the relationship of knowledge elements to business processes”. The knowledge map thus collates what individuals in an organisation have written down or entered into information systems like databases, as well as information that individuals in the organisation use but which are acquired from outside the organisation (e.g. websites, other university libraries, or subscription services). Patterns of how this knowledge flows in the organisation are also spelt out. This then

will show how well this knowledge is being used and shared in the organisation (Perez-Soltero, et al, 2006: 4).

### **2.9.2. Benefits of the knowledge audit**

Burnett, Illingworth & Webster (2004: 26) provide the following list of benefits that are gained by organisations that audit and map their knowledge:

- identifying what knowledge is needed to support overall organisational goals and individual as well as team activities;
- giving tangible evidence of the extent to which knowledge is being effectively managed and also indicating where improvements are needed;
- providing an evidence-based account of the knowledge that exists in the organisation and how that knowledge moves around in and is used by the organisation;
- providing a map of what knowledge exists in the organisation and where it exists, thus revealing both gaps and duplication;
- revealing pockets of knowledge that are not currently being used to good advantage and which are therefore an untapped potential;
- providing a map of knowledge flows and communication networks;
- revealing both examples of good practice and blockages and barriers to good practice;
- increasing the visibility of knowledge assets and therefore making them more measurable and accountable and giving a clearer understanding of the contribution of knowledge to organisational performance; and

- providing vital information for the development of effective KM programmes and initiatives that are directly relevant to the organisation's specific knowledge needs and current situation.

Roberts (2008: 587), however, stresses the difficulty of auditing tacit knowledge due to its intangible nature. In other words care should be taken that knowledge audits do not overlook this important category of knowledge.

### **2.9.3. Knowledge audit methodologies**

Buchanan & Gibb (2008: 3) provide a useful analysis of what they term commonly cited audit methodologies, namely those developed by Burk & Horton (1988), Orna (1990, 1999), Buchanan & Gibb (1998), and Henczel (2001).

#### **Burk and Horton (1988)**

This methodology outlines a step-by-step process to evaluate an organisation's information resources which involves four stages:

- 1) A survey is used to identify the organisation's information resources through interviews with staff.
- 2) Cost and value ratios are used to measure the identified information resources.
- 3) Individual information resources are analyzed by being mapped in relation to the structure, functions, as well as the management of the organisation.
- 4) A process of synthesis takes place by confirming information resources along with their strengths and weaknesses to the objective of the organisation.

Buchanan and Gibb, however, criticise this methodology for its lack of clear steps, tools and techniques that can be used to link information resources to the organisation's plans and goals.

### **Orna (1990, 1999)**

According to Buchanan & Gibb (2008: 4) Orna's audit methodology is more progressive than that of Burk & Horton. The methodology consists of ten steps, namely:

- 1) Analyse the information implications of key business objectives.
- 2) Ensure support and resources from management.
- 3) Get support from people in the organisation.
- 4) Plan the audit.
- 5) Find out by identifying information resources and information flows, including high level cost and value assessments.
- 6) Interpret the findings.
- 7) Present the findings.
- 8) Implement changes.
- 9) Monitor effects.
- 10) Repeat the audit cycle.

However, despite its many improvements on the previous methodology, Buchanan & Gibb again fault with it for not providing practical tools that can be used to carry out an audit.

### **Buchanan and Gibb (1998)**

This methodology engages a top-down approach and is said to be more comprehensive and incorporates tools and techniques that are required to carry out a successful audit. It comprises five main steps:

- 1) Promoting the benefits of the audit for the organisation by conducting a preliminary survey and ensuring commitment and support.
- 2) Carrying out a top-down strategic analysis followed by identifying information resources and information flows.
- 3) Analyzing identified information resources.
- 4) Analyzing the cost and value of information resources.
- 5) Synthesizing by reporting on the audit and developing an organisational strategy.

However, the disadvantage of the methodology, according to Buchanan & Gibb (2008: 4) is that it lacks depth and that it is not sufficiently extensive.

### **Henczel (2001)**

Heczel, on the other hand provides a methodology that incorporates elements from both Orna and Buchanan & Gibb. Its main characteristic is that it promotes a top-down strategic and organisational analysis, as well as including a record of information resources and the mapping of information flows.

The steps are as follows:

- 1) Plan audit.
- 2) Collect data.

- 3) Analyse data
- 4) Evaluate data and provide recommendations.
- 5) Communicate recommendations.
- 6) Implement recommendations.
- 7) Establish the audit as a regular, cyclical process.

Despite its many enhancements on previous methodologies Buchanan & Gibb (2008: 4) once again consider it to be lacking in 'practical guidance'.

Perez-Soltero et al. (2006: 5), Roberts (2008: 586), and Hylton (2002: 4) however, argue that most knowledge audit methods have shortcomings in that they either fail to focus or have given little devotion to the tacit know-how type of knowledge that is embedded within people's minds. As Roberts (2008: 586) puts it, "information auditing has received more attention than knowledge auditing". The abovementioned authors' outline of their knowledge audit designs is therefore outlined below.

**Perez-Soltero et al.** (2006) list the following ten stages for their suggested knowledge audit methodology:

- 1) Establishing the strategic organisational information and also identifying organisational processes.
- 2) Identifying organisation's core processes and establishing measurement criteria.
- 3) Prioritizing and selecting organisation's core processes.
- 4) Identifying key people as data sources.
- 5) Meeting with the key people.

- 6) Creating a knowledge inventory.
- 7) Analysing knowledge flows.
- 8) Knowledge mapping.
- 9) Knowledge audit reporting.
- 10) Continuous knowledge re-auditing.

**Hylton** (2002), on the other hand, divides the knowledge audit into three levels namely:

- 1) Knowledge Audit Level 1, which entails administering a questionnaire-survey to the employees of the organisation. This is aimed at giving insight into the background of the organisation, in terms of where the organisation is coming from, what has it done and achieved, how it did it, and also what the results were, etc. The results of the survey are then analysed and a report is generated on the findings while initial recommendations are also provided.
- 2) Knowledge Audit Level 2 involves doing face to face interviews with employees, especially a sample of the ones that took part in the questionnaire survey. This this helps in obtaining deeper insight into the “true and objective knowledge management position of the company” (Hylton, 2006: 7). Again, a report is generated and more detailed explicit recommendations are provided including extensive financial calculations.
- 3) Knowledge Audit Level 3 is the final stage of the audit process where the objective is to “identify, locate, chart, and map the main sources of explicit and tacit knowledge” (Hylton, 2002: 7). Thus, this final stage involves

performing a knowledge inventory, drawing up a knowledge map, charting the flow of knowledge in the organisation while also doing a knowledge gap identification exercise. The end result for this stage is a complete report detailing the explicit as well as quantifiable benefits of the recommendations provided. This also includes the total costs as well as the projected return-on investment in terms of short-term, medium-term, as well as long-term investments of the suggested knowledge management strategy.

Hylton (2002: 7) further states that should an organisation feel that it has gained enough insight regarding its knowledge management status after Knowledge Audits Level 1 and /or 2 then it may postpone any further auditing and instead begin to implement some or all of the recommendations that had come out of the applicable audit stage.

Roberts (2008: 587) starts his discussion of how to conduct a knowledge audit by mentioning the difference between explicit knowledge which he terms tangible evidence that is realizable, observable, and more readily transferable, and tacit knowledge which he refers to as intangible content that is transferable through intelligence, perception and trust. He further states that most people do not believe that tacit knowledge can be audited in the same way that explicit knowledge or information can be audited or accounted for. Although he does agree to some extent with the assertion, he is also quick to point out that tacit knowledge can be audited simply because it can be categorized. Thus he maintains that as long as knowledge audits recognize the dynamic nature of knowledge and that human knowledge is both

internal and private to the individual, it can be disseminated and shared through socialization, communication, and language.

**Roberts** (2008) subsequently lists 15 main components or elements that he advocates for an information and knowledge audit:

- 1) *Outline the business strategy* which will assist in defining the boundaries of the audit.
- 2) *Outline business activities* involving both internal and external stakeholders.
- 3) Locate and map business processes.
- 4) Establish the distribution, consumption, impact, and value of tangible and/or intangible outputs.
- 5) Identify both explicit and tacit *actions* resulting from internal and external factors that are aimed at particular achievements.
- 6) Outline the physical and financial capital
- 7) Establish the quantities as well as the qualities and competencies of available *human capital*.
- 8) Identify *intellectual property* which includes ownership of literary and artistic works, and other forms of creativity.
- 9) Identify *structural capital* which can be considered as the property of the organisation and its environment, which incorporates organisational structures, organisational behaviour, technologies, as well as procedures and processes.
- 10) Identify professionally managed information activities.
- 11) Gather internal data, information, intelligence and knowledge resources.
- 12) Gather external data, information, intelligence and knowledge resources.

- 13) Differentiate between internal and external information delivery.
- 14) Identify *customer capital* which involves auditing the extent of relationships with both suppliers and clients.
- 15) *Establish external stimuli and environmental factors* which can incorporate inventorying tools such as SWOT analysis.

#### **2.9.4. Selecting a knowledge audit methodology for this study**

From the discussion above it is clear that there are several knowledge audit methodologies that can be selected by an organisation depending on its requirements. The researcher, however, was of the view that none of the individual methodologies was individually suitable for her study. The audit methodology that she therefore adopted was derived from aspects taken from both the Hylton and the Roberts models. Thus the audit model for this study entailed:

- Conducting a questionnaire survey which constituted the administering of questionnaires to the target audience (Hylton's Knowledge Audit Level 1) and
- Conducting in-depth interviews with a smaller sample of key library staff in order to obtain greater insight into the different aspects of the research problem (Hylton's Knowledge Audit Level 2).

These data-collecting methods were designed to assist with

- identification of structural capital, i.e. establishing organisational structures, organisational behaviour, technologies, as well as procedures and processes

that would either impede or encourage knowledge sharing in the Unisa Library (Step 9 of Roberts' audit model);

- establishing the distribution, consumption, impact, and value of tangible and/or intangible outputs (Step 4 of Roberts' audit model). In other words, the study aimed to find out whether the organisational environment allowed for staff members who were considered knowledgeable in different areas of work to share the knowledge with less knowledgeable individuals.
- outlining the physical and financial capital (Step 6 of Roberts' audit model);
- establishing the quantities as well as the qualities and competencies of available human capital (Step 7 of Roberts' audit model);

The knowledge audit concluded with aspects of Hylton's Knowledge Audit Level 3 where a road map is outlined that the researcher feels the library can follow in order to attain a satisfactory level of knowledge sharing.

In summary the audit was structured to investigate the relevance and presence of the main critical success factors that have been identified as preconditions to effective knowledge sharing. The main knowledge sharing factors that were identified related to

- leadership and knowledge sharing;
- knowledge sharing culture;
- technology and knowledge sharing; and
- knowledge sharing resources and processes.

These factors were derived from the literature in the field and have been discussed in this chapter (see also views of Al-Alawi, Al-Marzooqi & Mohammed, 2007; Khatibian, Pour, & Jafari, 2010; Skyrme, 2007 & 2001; Tiwani, 2002). The questions in the questionnaire and interview schedule that were used in this study were therefore based on these factors (cf. the Appendix A and Appendix B). Further details regarding the methodology used for this knowledge audit are discussed in chapter three.

## **2.10. Conclusion**

KM is one of the most essential elements that lead to the success and competitiveness of an organisation in the era of the knowledge society. It is argued that only organisations that have clearly defined KM strategies can thrive in the current knowledge economy. Knowledge sharing forms an integral part in ensuring that knowledge flows through the organisation. In fact it is important that individuals in the organisation are motivated to create, acquire, and share knowledge. This in turn will lead to the organisation functioning efficiently and effectively.

However it is further important that in every organisation a knowledge audit exercise is performed to test the level of knowledge sharing in the organisation and to ensure that knowledge that resides in the organisation is managed effectively. There are several knowledge audit methodologies available that organisations can choose from depending on the organisation's requirements. The knowledge audit that was conducted for this study was to establish the state of knowledge sharing practices in the Unisa Library and was based on the internationally accepted critical factors that relate to effective knowledge sharing (cf. Appendix A; Appendix B).

## **CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY**

### **3.1. Introduction**

The purpose of this chapter is to outline the research methodology that was used in the study. This includes an overview of the research design, the population and sample, the sampling procedures, the research instruments, validity and reliability, and data collection procedures.

The focus of this study was to establish the state of knowledge-sharing practices in the Unisa Library and the need for a KM strategy to address the sharing of knowledge among colleagues. The ultimate aim is to make recommendations that would assist with improving the service to the library clients. The chapter, therefore, will present the research methodology which was used by the researcher to collect the data required.

### **3.2. Research design**

According to Msweli (2011: 58) and Mouton (2001: 55) the research design takes into consideration the questions, aims and goals that are outlined in the research problem. It seeks to map out a clear plan for dealing with research questions as well as indicating the sources from which the data will be collected.

As discussed in chapter two the knowledge audit was designed to use both a questionnaire study and interviews to investigate the knowledge sharing practices in the Unisa Library. The methodology was therefore based on a mixed methods, or

triangulated approach that combined both quantitative and qualitative research methods.

### **3.2.1. Mixed method research approach**

The mixed method approach is also frequently referred to as 'triangulation', 'mixed methodology', 'multi-strategy research', 'integrated methods', 'multi-method research', and 'combined methods research'. All these names are simply an indication of how the different methods of research can be mixed within the same study (Denscombe, 2007: 107-8). Although researchers have been incorporating more than one research method in their projects for many years, the formal use of the concept of the 'mixed research approach' has only come to the fore during the last few decades.

The following are the main distinguishing features of the mixed methods approach (Denscombe, 2007: 8):

- use of quantitative and qualitative approaches within a single research project;
- explicit focus on the link between approaches, which involves triangulation that has already been discussed above as 'the practice of viewing things from more than one perspective';and
- emphasis on practical approaches to research problems.

Triangulation, more specifically, also refers to the use of mixed methods to increase the confidence in the findings (Yeasmin & Rahman, 2012:156). It is argued that by incorporating both qualitative and quantitative research methods greater depth of

understanding and insight into the research problem can be provided. Furthermore, it helps reduce biases that would have occurred if only one approach was used. In other words, the validity of the research findings is increased (Msweli, 2011: 60). Simply put, “it is better to look at something from several angles than to look at it in only one way” (Neuman, 2006: 149). Researchers therefore get a better idea about and can also see all aspects of a phenomenon if they measure it in more than one way.

In summary, the main rationale for using the mixed research method is that sometimes, as in the case of this research project, a complete picture cannot be generated by using only one method (Bryman, 2008: 264). Therefore, the objective of using both quantitative and qualitative research approaches in this study was to utilise the advantages and benefits of both these approaches.

### **3.2.2. Quantitative research**

Quantitative research is concerned with systematically asking a large number of individuals the same questions and recording their responses (Neuman, 2006: 43). According to Babbie (2007: 405) the phenomena that are reflected by the observations from the collected responses are then represented numerically. Roberts (2010: 142), therefore, equates quantitative research to ‘logical positivism’. Denscombe (2008: 332), in turn, states that positivism is a social research approach that seeks to define social phenomena using the natural science approach to research.

Quantitative research begins with a specific plan with a set of detailed questions or hypothesis. The researcher then proceeds to seek facts from a selected sample by finding out the causes of human behaviour. According to Msweli (2011: 64), quantitative data can be collected using research instruments such as questionnaires, interviews, and observation. She further asserts that the quantitative research approach employs deductive reasoning in that the questions asked usually require explanation of incidences that can be quantified. The questions have to do with the 'what', 'where', 'how many' and 'how much' aspects of the research problem (Msweli, 2011: 60; Roberts, 2010: 145).

Babbie (2007: 405) also emphasizes the ability to convert data into a quantifiable form as one of the main characteristics of the quantitative approach to research. This is particularly useful in social research as the data collected is usually not numerical and therefore not easy to quantify. The quantitative research approach further enables "the use of standardized measures so that the varying perspectives and experiences of people can fit into a limited number of predetermined response categories to which numbers are assigned" (Patton, 2002: 15).

All these factors were important for the researcher in deciding to adopt this approach as one of the methods for the collection of data from the sample of professional librarians. In the quantitative component of the study a questionnaire was therefore used to collect the data. It consisted of pre-determined questions in a standardised format that provided data that could easily be quantified (see Appendix A).

### **3.2.3. Qualitative research**

The qualitative approach to research involves studying issues in depth and in detail without the constraints of having pre-determined categories (Patton, 2002: 15). This encourages openness and depth in the data. Neuman (1997: 328) states that qualitative research is non-positivist in that it is not concerned with trying to convert data into a quantifiable form. Instead the emphasis is on establishing how respondents interpret their social worlds and surroundings and on studying phenomena in their natural settings “focussing on the process of implementation rather than on quantifiable outcomes” (Mouton, 2001: 161). In the process the information that is extracted from respondents relates to their specific environment (Outhwaite, 2007: 580)

In essence, qualitative research is less standardized and is often inductive (Neuman, 2006: 458). Researchers are less likely to know what the data will reveal at the analysis stage as they cannot predict the responses of the respondents. In other words, there is no set or pre-determined answers for the respondents to choose from.

Neuman (2006: 499) further elaborates on the essential characteristics of qualitative research as follows:

- the data in a qualitative report are more difficult to condense as they are usually in the form of words, pictures or sentences and can include quotes and examples;

- the researchers may want to create a subjective sense of empathy and understanding among readers in addition to presenting factual evidence and analytic interpretations;
- the less standardized techniques used for gathering data, creating analytic categories and organizing evidence-may be particular to individual research projects;
- the goal is usually to construct new theories from the evidence.

Therefore, in contrast to the interpretation of quantitative data where variables are slotted into pre-determined response categories, with qualitative research, data is expressed in the form of words, including quotes and the descriptions of events (Neuman, 2006: 160).

The researcher conducted interviews with a sample of middle managers to obtain their qualitative responses. The objective was to establish their in-depth views on knowledge sharing within their work context and which related to their experiences (see Appendix B). The ultimate aim was to extract new innovative ideas and thoughts that will assist in encouraging knowledge-sharing activities in the Unisa Library. The insight provided by these more senior respondents further assisted the researcher to establish themes and ideas, some of which were not necessarily envisaged at the start of the project.

In summary, the quantitative approach angle answered the 'what', 'how many', 'where', 'how much', while the qualitative angle addressed the 'how', and 'why' aspects of the research project. As was stated previously, the researcher was of the opinion

that both qualitative and quantitative research approaches have positive attributes and that the nature of this research project suggested that a mixed or triangulated research design should be used for the study.

### **3.3. Population and sampling procedures**

According to Bless and Higson-Smith (1995: 85) a population is “the entire set of objects and events, or groups of people, which is the object of research and about which the researcher wants to determine some characteristics”. As mentioned before, the target population for this study was the professional staff from the various directorates and sections of the Unisa Library, including middle managers from the same directorates.

A decision was, however, taken to only collect data from professional staff members who were working in the main library at the time that the study was conducted, i.e. a sample of professional staff was selected from the entire population. Neuman (2006: 219) defines sampling as the collection of a small number of units or elements taken from a larger population or collection. He further states that if the sampling technique that has been used is correctly applied, the researcher can then extend conclusions drawn from the sample to the entire population. The researcher suggests that this was the case in her study and that the professional librarians from the main library comprised a sample that is sufficiently representative of Unisa Library’s entire professional staff complement.

There are two widely used sampling procedures or techniques in research, namely- probability and non-probability sampling. Probability sampling includes the following types of sampling:

- simple random sampling;
- interval or systematic sampling;
- stratified sampling; as well as
- cluster or multi-stage sampling. (Denscombe, 2007: 14)

Non-probability sampling on the other hand includes the following types of sampling:

- accidental or availability sampling;
- purposive or judgement sampling; and
- quota sampling (Denscombe, 2007: 17; Bless and Higson-Smith, 1995: 89).

According to Denscombe (2007:13) probability sampling is simply “the selection of people or events literally at random”. In other words, the researcher randomly draws a sample with the objective that each unit has an equal chance or probability of being selected and that the sample will be representative of the entire population. Msweli (2001: 64), further states that with probability sampling the probability that any unit of the target population will be chosen for the sample is known while this is not the case with non-probability sampling. With purposive sampling, the researcher selects the elements or units of the sample to satisfy the specific needs of the study (Denscombe, 2007: 17).

In this study, the researcher purposively selected all professional library staff from the Unisa Main Library for her study. The reason for this selection was twofold, namely

- the main library staff were accessible since that is where she works;and
- the nature of her study required the responses of professionally qualified staff.

The questionnaire was distributed amongst all professional staff members that were below manager level and working in the main library at the time of the study. Interviews were, in turn, conducted with all the middle managers at the Unisa Main Library that were available and able to participate at the time of the study.

The interview study was purposively conducted with the middle managers since the researcher felt that they would provide valuable and meaningful qualitative data. By interviewing them personally she was able to

- establish their in-depth views and perceptions on knowledge sharing activities in their respective departments;
- their awareness of the benefits of knowledge management tools in general; and
- their ideas on how to best ensure that the knowledge embedded in people's minds is not lost when staff leave the library either by way of resignation or retirement.

### **3.4. Research technique and data collecting instruments**

This study employed survey research methods for gathering data. Neuman (2006: 272) lists the survey as the most widely used data collecting technique in the social sciences field. Questions asked are usually about the respondents' beliefs, opinions, characteristics and behaviours. In other words, one can gather information on many

variables in a single survey. This can be done by asking many respondents the same questions, and in the process measure many variables, test multiple hypotheses, and at the same time establish past and present behaviours.

The questionnaire that the researcher used for this study was one of the two survey research instruments that she used for collecting data. The questionnaire was delivered in person to all the professional staff members from the various directorates of Unisa's Main Library. The respondents read the questions themselves and then marked the relevant answers that best described their beliefs and opinions (see Appendix A for a copy of the questionnaire). The second method was the interviews that she conducted with the middle managers of the various directorates and sections of the main library. For this purpose an interview schedule was compiled to ensure that the interviews were conducted in a uniform way and that all the data she required was collected (see Appendix B for a copy of the interview schedule).

Neuman (2006: 278 - 281) lists ten possible errors that should be avoided when designing research questions, namely:

- jargon, slang, and abbreviations;
- ambiguity, confusion, and vagueness;
- emotional language and prestige bias;
- double-barrelled questions;
- leading questions;
- asking questions that are beyond respondents' capabilities;
- false promises;

- asking about distant future intentions;
- double negatives;
- overlapping or unbalanced response categories.

Neuman (2006: 277) also points out the main characteristics of good research questions as those that:

- avoid confusion and keep the respondent's perspective in mind; and
- give the researcher valid and reliable measures and help respondents feel they understand the questions and that their answers are meaningful.

The researcher adhered to all the suggestions made by Neuman in compiling the questionnaire and the interview schedule. In this study data was primarily collected about the perceptions, attitudes and views of the Unisa Library professional staff with regard to knowledge sharing. The study also established the behaviour and actions of staff towards the sharing of knowledge.

The questionnaire consisted mostly of structured closed-ended questions and only four open-ended questions were included. The latter invited respondents to provide their general views on knowledge sharing enablers, benefits and barriers at the Unisa Library. The close-ended questions, in turn, mostly consisted of question formats that used a Likert scale response category format while the remaining four contained dichotomous yes/no response categories.

Typically, a Likert scale is an index or ordinal rating scale that is used to measure attitudes, beliefs and opinions (Babbie, 2007: 171). In each question, respondents were asked to indicate a degree of agreement or disagreement with a statement

relating to the critical knowledge sharing attributes outlined in chapter 2.9.3. The average index score was then calculated for each of the individual statements (see Questionnaire in Appendix A).

By interviewing the middle managers from the various sections of the Unisa Library, the researcher's intention was to establish their in-depth view of knowledge sharing in the context of their work environment and their experiences. The aim was to extract new innovative ideas and thoughts that will assist in encouraging knowledge-sharing activities in the Unisa Library.

The survey was further conducted taking care to ensure that valid and reliable results were obtained.

### **3.5. Validity and reliability**

According to Howard (1985: 98) the definition of validity is influenced by accuracy which in turn is related to content validity. Content validity, he argues, is characterized by a sample that is representative of the entire population from which it was selected. Baumen (1992: 13) further states in this context that data can only make sense if it relates directly to the purpose of the study.

Bernard (2011: 41) also concurs with the above. He asserts that validity refers to the accuracy and trustworthiness in terms of the instrument used for research, the data itself, as well as the findings. For instance, the instruments used for collecting data must be appropriate for gathering data that will be able to answer the research

question, or measure a particular concept. The questions asked should, therefore, address the objectives of the study.

Reliability, on the other hand, refers to “a scientific observation’s repeatability or replicability” (Howard, 1985: 25). Bernard (2011: 42), in turn, refers to reliability as being related to the possibility of coming to the same answer if a particular instrument is used to measure a specific theory more than once. In other words, to call data and findings reliable, one must get the same answer every time it is measured or tested. As Yin (2009: 49) puts it, “the goal of reliability is to minimize the errors and biases in a study”.

It is obvious that both validity and reliability are important components of a good research project. Denscombe (2007: 203) further identifies factors that could hinder reliability. For instance, he argues that the presence of the interviewer at the data gathering stage of research can have an adverse effect on the consistency and objectivity of the data collected.

To ensure the highest possible validity and reliability in the execution of this study, the researcher therefore used a mixed method (triangulation) research approach. Triangulation, as explained above, helps to strengthen these factors in a study (Patton, 2002: 247). Thus, it was hoped that by combining both quantitative and qualitative data collecting techniques, it would help to counter or eliminate the limitations inherent in each method. Consequently, in this study the researcher was able to support the data collected from the professional librarians by means of a questionnaire with the data obtained from the in-depth interviews with the managers.

### **3.6. Data collection procedures**

This section describes the steps that were taken in the study to collect the data. Data collection was done during the first weeks in December 2012. The rationale for selecting this period was that it was after the busy examination period and before the year-end holiday period. The respondents, therefore, had sufficient time to respond to the survey questionnaire and for the researcher to schedule and conduct interviews. The researcher requested a few of her colleagues to deliver the questionnaire by hand to the target respondents, namely the entire population of 61 professional library staff who were at work in Unisa's Main Library during the data collecting period. A covering letter which described the purpose of the research project accompanied the questionnaire. This was followed by telephone calls to assure the respondents of the anonymity of the survey and to remind them of the due date.

The same colleagues then collected the completed questionnaires. Of the 61 questionnaires that were distributed, 43 responses were received. This provided a 70% response rate which is generally regarded as being satisfactory (see Nulty (2008:306) who cites Richardson (2005), Babbie (1973) and Kidder (1981) who have stated that 50% is regarded as an acceptable response rate in social research postal surveys). These responses were then encoded and processed.

During this period the researcher also conducted the personal interviews with the all the middle managers that were available at the time of the study. She telephonically contacted the nine senior staff members to request an appointment to conduct an interview. Seven interviews were granted and each took about 45 minutes per person. At the start of the interview the researcher again explained the purpose of the research

project and stressed the anonymity of the exercise. All responses received were carefully transcribed and appropriately coded.

### **3.6.1. Best time to collect data**

According to Roberts (2010: 158) the time when research is conducted is critical as it can affect the response rate. It is important to consider the availability of the target population. In view of this the researcher planned to gather the data when the library was less busy, i.e. in the period after the final examinations in order to ensure the full cooperation of the staff members. Care was further taken to conclude the survey before the start of the year-end holiday period. A good response rate of 70% was obtained for the questionnaire survey, i.e. out of the 61 questionnaires that were distributed, 43 were completed. Further as previously stated, seven of the nine managers granted interviews.

### **3.7. Data analysis**

The structure used to analyse the data was based on the main themes represented in the questionnaire and interview schedule used. As mentioned previously the questionnaire and interview schedule was based on critical knowledge sharing factors that were identified during the literature review and which can be used used to test the knowledge sharing maturity level of an organisation (see discussion in chapter 2 and specifically 2.9.3 and the views of Al-Alawi, Al-Marzooqi & Mohammed, 2007; Khatibian, Pour, & Jafari, 2010; Skyrme, 2007 & 2001; Tiwani, 2002).

The themes considered in the study were issues relating to the impact on knowledge sharing of

- the leadership of the library including the organisational structure;
- organisational culture, including trust between management and staff as well as among librarians themselves;
- technology used for KM purposes; and
- knowledge sharing resources and processes used.

General themes were also investigated.

The researcher used Microsoft's Excel programme to calculate percentages and averages to analyse the raw data that was collected relating to each theme from the respondents. These calculations were displayed in tables and in some instances by means of charts.

### **3.8. Conclusion**

The chapter described the research methodology that was followed for the research project. A mixed method approach was used where both quantitative as well as qualitative data collection techniques were used and where both questionnaires and face-to-face interviews were employed. The aim was to ensure that advantages from both approaches were enjoyed, and that an extensive degree of reliability and validity of the data was guaranteed.

## **CHAPTER 4: DATA ANALYSIS**

### **4.1. Introduction**

The objective of this chapter is to describe and analyse the results that were obtained during the data collection process. The contextualisation and discussion of the results will be done in chapter 5.

The aim of the study was to provide insight into the extent to which knowledge sharing practices occur in the Unisa Library and as mentioned in chapter 3, the structure of this chapter is based on internationally accepted themes that are used to test the level of knowledge sharing in an organisation. The themes considered in the study were the prevalence and impact of the following on knowledge sharing:

- the leadership of the library including the organisational structure;
- organisational culture including the trust between management and staff as well as among librarians themselves;
- technology related to knowledge management;
- knowledge resources and knowledge management processes adopted.

General themes that were also investigated included respondents' opinions with regard to benefits of knowledge sharing, incentives that would encourage knowledge sharing as well as barriers that prevent the sharing of knowledge among staff.

The data for the study was collected by questioning the professional librarians employed in the various sections of Unisa's main library on knowledge sharing activities within the library. The professional librarians that were below manager level

were questioned by means of a questionnaire that was distributed (cf. Appendix A for an outline of the questionnaire). This was supplemented with interviews with middle managers soliciting their opinions on the status of knowledge sharing among their staff (cf. Appendix B for an outline of the interview schedule).

Out of the 61 questionnaires that were distributed, 43 were completed, which represented a 70% response rate. This response rate resonates with what Babbie (2007: 262) regards as a very good response rate. He claims that according to published social research literature a 50% response rate is regarded as adequate, while 60% is considered as good and 70% very good. Interviews were further requested with nine middle managers, and seven interviews were granted.

The reporting of the analysis of the data from the interviews have been integrated with that of the data that was collected by means of the questionnaires where similar questions were asked. In the instances where questions were not covered in both the questionnaires and the interviews, the reporting will be covered separately.

## **4.2. Analysis of the results**

In this section the responses obtained from the questionnaire as well as the comments received during the interviews will be reported on.

### **4.2.1. Categorisation of respondents by directorate**

The table below categorises the questionnaire study respondents by directorate.

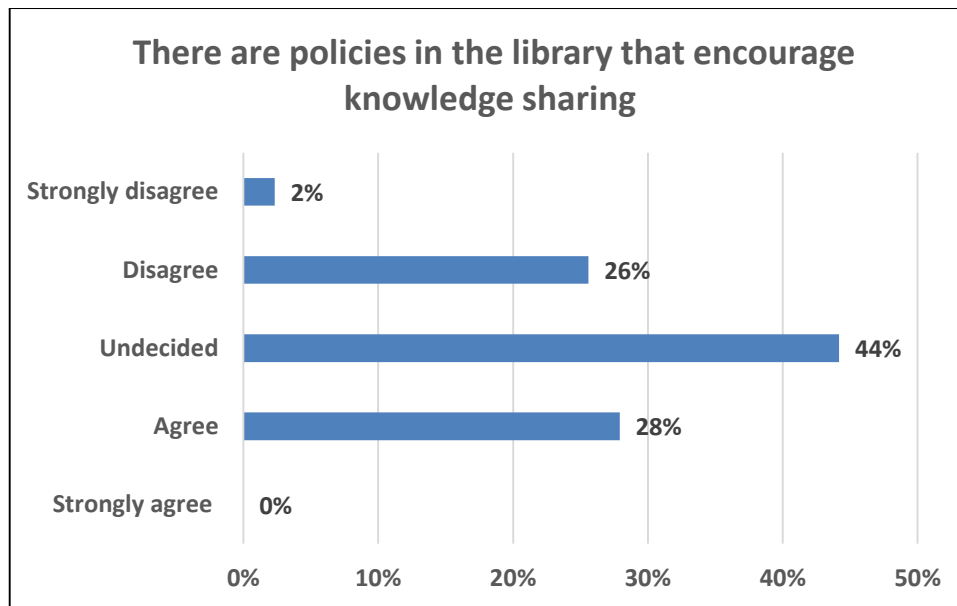
*Table 4.2-1: Respondents' profile*

Directorate	Number of respondents
Client Services	18
Information Resource & Content Management (IRCM)	16
Information Resource & Distribution (IRD)	8
Library Technology Services (LTS)	1
Total	43

#### **4.2.2. Leadership factors and knowledge sharing**

##### **4.2.2.1. Knowledge sharing policies**

The respondents were asked if they were aware of any knowledge sharing policies that exist in the library (cf. Appendix A, question1; Appendix B, question 1). As is evident from Figure 4.2-1 below, 28% (11) of the respondents from the questionnaire study disagreed with the statement that there are policies in the library that encourage knowledge sharing, the largest proportion (44%) (19) of the respondents was undecided and 28% (12) responded positively.



**Figure 4.2-1: Knowledge sharing policies**

Most (5) of the middle managers who were interviewed stated that there was no written policy on knowledge sharing in the library. However, the remaining two mentioned the mentoring programme that has recently been introduced in the library. One manager further mentioned the introduction of a succession planning programme. Thus she stated:

*“Yes. Succession planning. The library is waiting for the institution to roll out the programme to benefit those understudying certain individuals”.*

#### **4.2.2.2. Organisational structure and knowledge sharing**

On the question of whether the organisational structure of the library promotes and facilitates knowledge sharing among the staff (cf. Appendix A, question 2), 44% of the

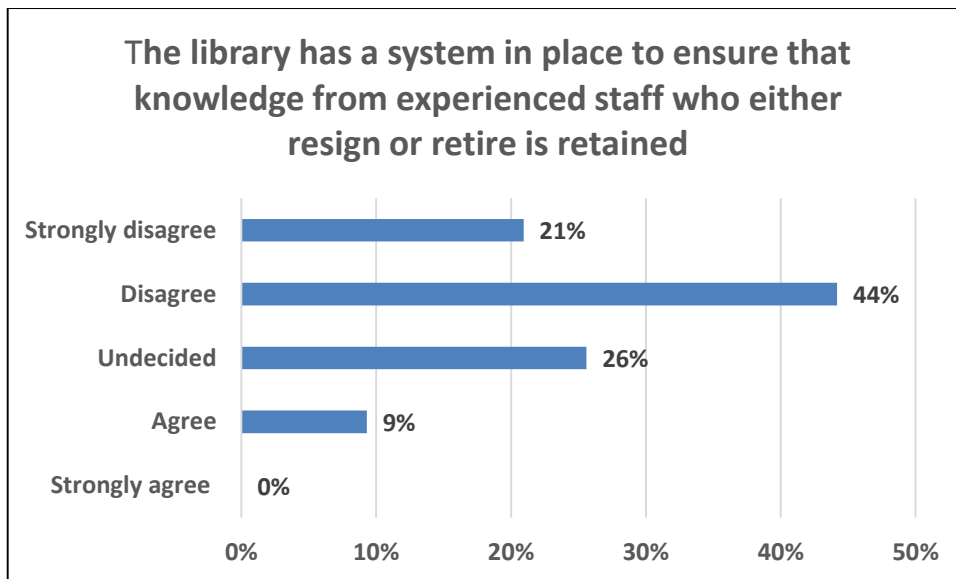
questionnaire respondents did not seem to think so while 16% were undecided on the issue. Only 40% agreed with statement. See Table 4.2-2 below.

**Table 4.2-2: Organisational structure**

Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	Total
0	17	7	18	1	43
0%	40%	16%	42%	2%	100%

#### **4.2.2.3. Knowledge retention**

This question sought to establish the availability of structured systems in the library to ensure that tacit knowledge from experienced staff who either resign or retire is captured and made accessible to the staff who remain behind (cf. Appendix A, question 3; Appendix B, question 5). According to Figure 4.2-2 below, 65% of the questionnaire respondents did not agree with the statement that the library has a system in place to ensure that knowledge from experienced staff who either resign or retire is retained (19 disagreed and 9 strongly disagreed). Only 9% were in agreement, while 26% of the respondents were undecided.



**Figure 4.2-2: Knowledge retention**

It became obvious during the interviews with the middle managers that they also thought that there was a lack of a structured system for the entire library that encourages knowledge retention. However, most of them seemed to be aware of the necessity of such procedures. Many of them indicated how they have instituted such procedures in their respective sections, albeit informally, by means of a mentorship system, 'buddy system' and in some cases job shadowing. Thus as one respondent put it:

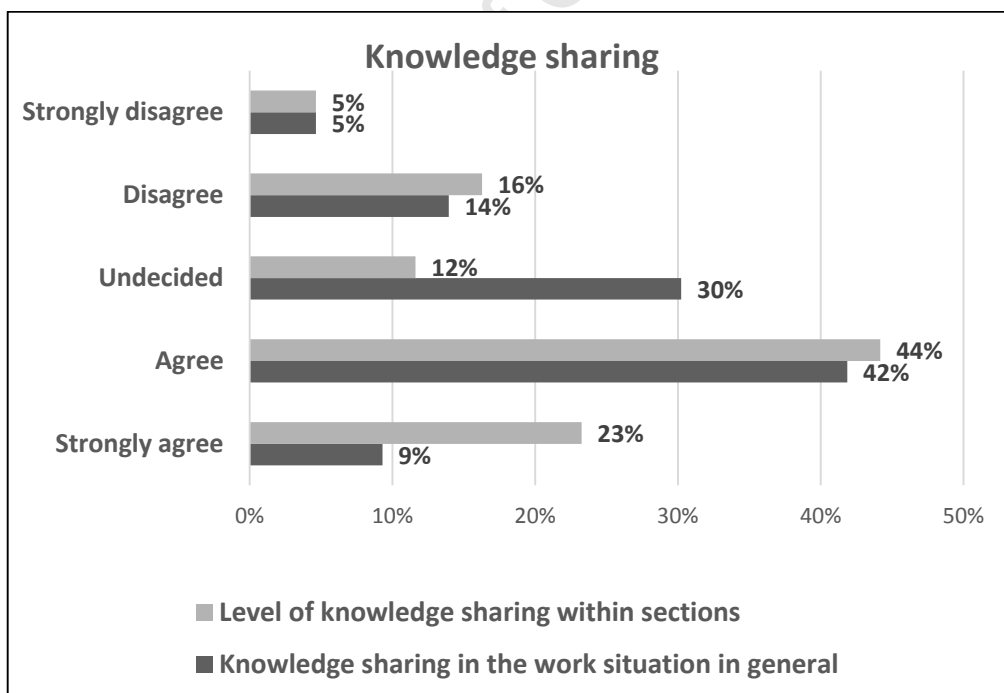
*"It is the responsibility of a Manager to ensure business continuity, therefore to ensure all required documentation and procedures are available so that there is no breakdown in the delivering of services regardless of who performs the activities".*

### 4.2.3. Organisational culture that promotes knowledge sharing

#### 4.2.3.1. Knowledge sharing among the librarians

With regard to the question of whether there was a good level of knowledge sharing among the professional librarians in the various sections of the library (cf. Appendix A, question 4; Appendix B, question 7), the questionnaire results showed that a strong majority (67%) responded positively (See Figure 4.2-3 below where 23% strongly agreed and 44% agreed).

However, when it came to the question relating to knowledge sharing in the work situation in general (cf. Appendix A, question 5) the number of positive responses dropped to 51% (9% strongly agreed and 42% agreed), whereas 19% were negative, and a sizeable percentage (30%) were undecided.



**Figure 4.2-3: Knowledge sharing**

During the interviews, all the middle managers stated that librarians in their sections do share knowledge. For instance they mentioned weekly meetings as one of the vehicles they use for knowledge sharing. Below are pertinent remarks that emanated from the interviews:

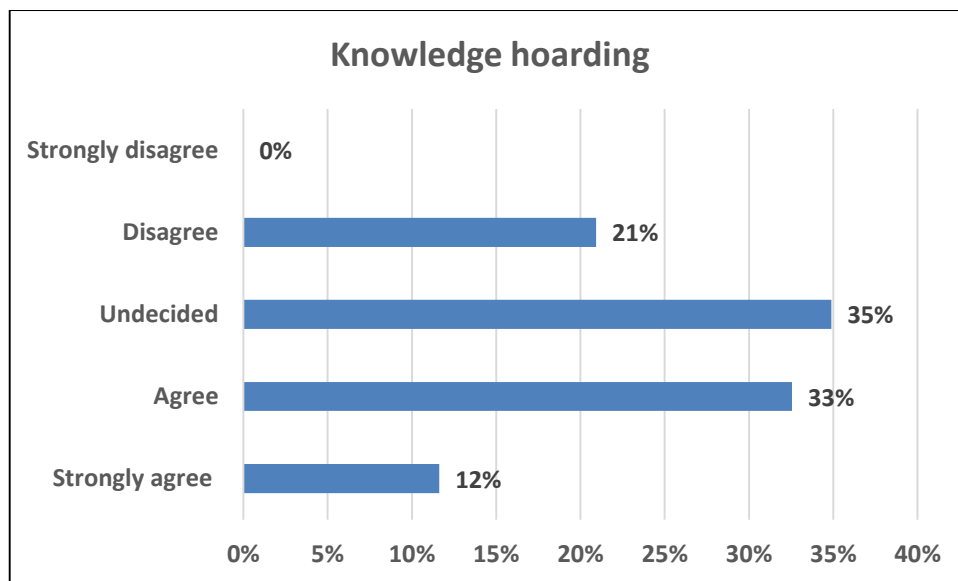
*“Yes, in a very informal rather than structured manner. However I introduced show and tell sessions for processes rather than knowledge sharing. I also initiated that procedure manuals be translated from Afrikaans into English”*

*“Yes – show and tell sessions, sharing of new trends and technology systems, buddy system for new staff and weekly meetings”.*

*“Yes, due to the nature of our responsibilities we have to share knowledge in order to ensure that there is no breakdown in services”*

#### **4.2.3.2. Knowledge hoarding**

It can be seen from Figure 4.2-4 below that with regard to the question relating to whether knowledge is being hoarded by the library staff, a considerable number of the questionnaire respondents (45%) concurred with the statement that there was hoarding of knowledge among librarians in their respective sections (33% agreed and 12% strongly agreed). Only 21% disagreed with the view while the remaining 35% were not sure. (cf. Appendix A, question 6).



**Figure 4.2-4: Knowledge hoarding**

**4.2.3.3. Availability of essential knowledge**

The purpose of asking the question was to find out if knowledge that is vital in the librarians’ daily activities is easy to obtain (cf. Appendix A, question 7). Table 4.2-4 reflects the responses from the questionnaire respondents:

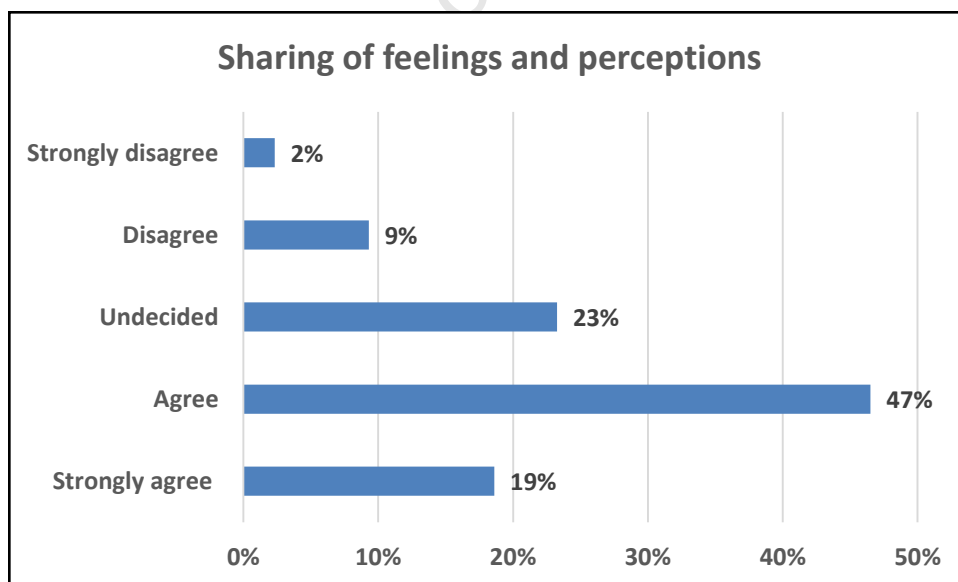
**Table 4.2-3: Availability of essential knowledge**

Strongly Agree	Agree	Undecided	Disagree	Strongly disagree	Total
9	24	6	3	1	43
21%	56%	14%	7%	2%	100%

As is evident from the table above, a considerable majority of the questionnaire respondents were positive that knowledge that is relevant to their work is readily available (21% strongly agreed and 56% agreed), whereas 14% of the respondents were not sure.

#### **4.2.3.4. *Sharing of feelings and perceptions***

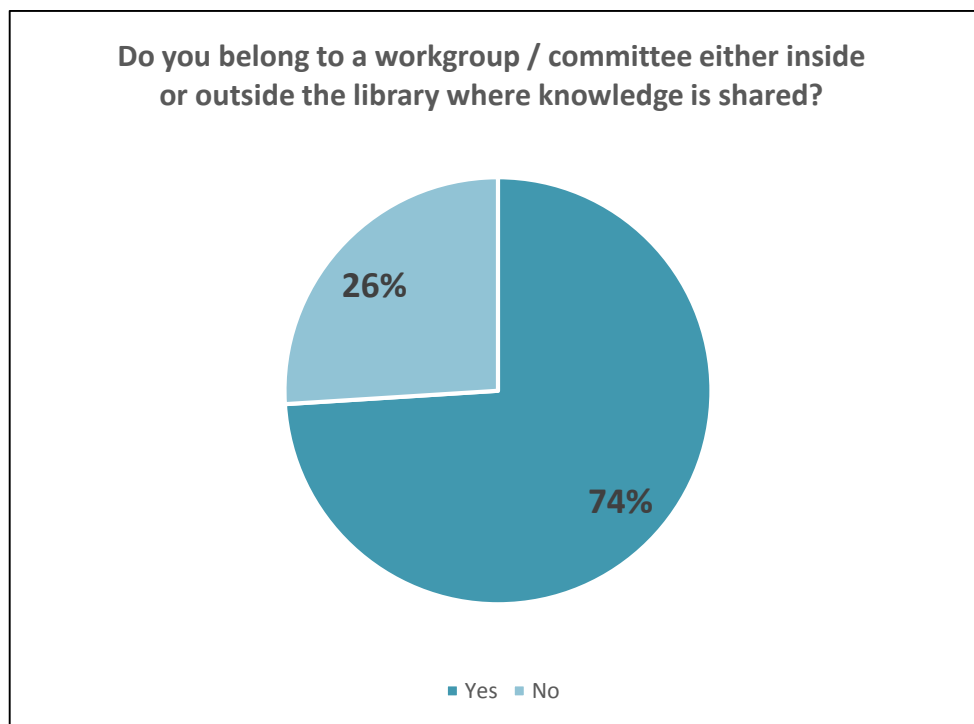
It can be seen from Figure 4.2-5 below that the majority (65%) of questionnaire respondents were of the opinion that the work environment allows for easy sharing of feelings, ideas and perceptions among colleagues about issues that concern them (19% strongly agreed and 47% agreed). (cf. Appendix A, question 8).



***Figure 4.2-5: Sharing of feelings and perceptions***

#### 4.2.3.5. *Affiliation to a knowledge sharing group*

When asked about whether they belonged to a group either inside or outside the library (cf. Appendix A, question 9; Appendix B, question 12) a large majority of the respondents (74% ) answered in the affirmative. Only 26% indicated that they do not belong to any knowledge sharing group. See Figure 4.2-6 below.



**Figure 4.2-6: *Affiliation to a knowledge sharing group***

The workgroups or committees that were mentioned by the respondents included College Teams, the Information Literacy Programme, Library Disability Forum, Library Systems Workgroup, Employment Equity Forum, Library Web Forum, Library Staff Training & Development Forum, Training Forum, Digital Library Forum, Marketing Forum, Library Professional Board, Uniflow Workgroup, myUnisa Workgroup, Web

### 3.0 Investigation Task Group, Millennium Workgroup, and the Discovery Platforms Investigation Workgroup.

On the type of knowledge shared in these workgroups or forums (cf. Appendix A, question 10) the respondents indicated that it was work-related information and also information pertaining to the particular group they belong to. In some groups like the College Teams, respondents stated that they share knowledge on the various sections from which the members of the groups come from, with peer training as one of the vehicles used to transfer this knowledge. Below are some of the comments by the respondents:

*“The Library Professional Board where issues relating to the development of LIS are discussed”*

*“The Discovery Platform Committee where different databases are explored in order to have a better single platform”*

*“Library Disability Forum where issues related to disability are discussed – very open”*

*“College Team where there is forced sharing of knowledge as a result one never knows how much is held back”*

*“Library Systems Workgroup - knowledge regarding our catalogue is shared”*

*“Web 3.0 Workgroup – knowledge regarding new technologies and how to apply them in the library”*

It would seem, from the interviews with the managers that they mainly belong to workgroups that pertain to the management of the library, e.g., Library Management Team (LMT), the Process Owners Forum (POF). However, some also listed some of the workgroups that the rest of the staff also belonged to like the Millennium and the Disability workgroups as well as the Professional Library Board.

On the question about the type of knowledge that is shared in the workgroups or committees (cf. Appendix B, question 13), some of the managers provided the responses listed below:

*“Library system”*

*“In the management forum we discuss corporate issues including planning for the year and we monitor the milestones reached and share our experiences or challenges in executing projects and our plans..*

*In the Process owners forum we discuss issues pertaining to the processes that we engage in on daily business. We also discuss the dependencies that we have among each other and how perhaps to overcome obstacles in our daily work.*

*“Mostly job related as well as issues regarding services to people living with disabilities”.*

*“Matters related to my area of responsibility and general Library services and process matters”*

*“Job related knowledge”*

Figure 4.2-7 below indicates the responses obtained to the question whether the respondents belong to a professional network outside Unisa where knowledge is shared. It can be seen that half of the respondents do belong to such a network, while the other half does not subscribe to any professional network (cf. Appendix A, question 11).



**Figure 4.2-7: Membership of professional networks outside Unisa**

The Library & Information Association of South Africa (LIASA) and the South African Online User Group (SAOUG) were the associations that were mentioned by most of the respondents. Some of the other groups that were mentioned were the Organisation of South African Law Libraries (OSALL), Interest Group for Bibliography Standards (IGBIS), South African National Library and Information Consortium (SANLiC), Innovative Users Group Southern Africa (IUG-SA), the South African

Society of Archivists (SASA), and the Association of Southern African Indexers and Bibliographers (ASAIB).

The comments received from the respondents indicated that the type of knowledge that is shared in these professional networks generally relate to LIS trends as well as best practices.

#### **4.2.4. Technology that enables knowledge sharing**

##### **4.2.4.1. *Availability of technologies and the librarians' skill in these technologies***

It is apparent from Table 4.2-5 below that on the whole, the respondents believe that the library has the necessary technology that can be used for knowledge sharing purposes (cf. Appendix A, questions 12-15; Appendix B, questions 14-18). For instance, 47% of them strongly agreed with the statement that the library has adequate technologies that are needed to facilitate knowledge sharing, while 51% of the respondents agreed. These technologies include the intranet, telephones, email, the internet, etc. Only 2% of the respondents were unhappy with the technology in the library. It can further be seen that 86% felt that there were adequate technologies that can be used to capture and store relevant knowledge for librarians (e.g. knowledge databases and repositories), while 7% were undecided on the issue.

**Table 4.2-4: Availability of technologies and the librarians' skill in these technologies**

<b>Technologies and the librarians' skill</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Undecided</b>	<b>Disagree</b>	<b>Strongly disagree</b>
<b>The library has technologies that are needed to facilitate knowledge sharing</b>	<b>20 (47%)</b>	<b>22 (51%)</b>	<b>0 (0%)</b>	<b>1 (2%)</b>	<b>0 (0%)</b>
<b>Technology that can be used to capture and store relevant knowledge for librarians is available</b>	<b>19 (44%)</b>	<b>18 (42%)</b>	<b>3 (7%)</b>	<b>3 (7%)</b>	<b>0 (0%)</b>
<b>Librarians have the skills needed to use knowledge sharing technologies</b>	<b>17 (40%)</b>	<b>19 (44%)</b>	<b>4 (9%)</b>	<b>3 (7%)</b>	<b>0 (0%)</b>

Responses provided by the five managers during the interviews indicated a different picture. They felt that the technology in the library was not sufficient to facilitate knowledge sharing. Although the availability of the intranet was mentioned by these respondents, they felt that it was not satisfactory as it is not regularly updated. Thus, some of their responses appear below:

*“No, the intranet is not updated regularly”*

*“The Intranet and Library web site are used to a certain extent but the Enterprise content management (ECM) will be ideal. But this will not ensure that staff will consult these sources of information, my experience is that it is always easier to ask somebody rather than go and read and find what you need”.*

*“Yes, the intranet, although not regularly updated”.*

On the question relating to the availability of technology that can be used to capture relevant tacit knowledge in the library, four of them mentioned the intranet, blogs, wikis as well as Google docs. One of them also cited the ECM system which the university is planning to implement in the near future, while one of them was not sure. Technology to capture external knowledge was viewed by six managers as being non-existent, while one respondent was not sure. One respondent talked about a website that belongs to a group that she belongs to. Thus she stated:

*“No not really. We use a wiki for external links but for instance the Innovative User Group has a wonderful website and clearinghouse. Similarly Innovative’s Customer Services web site is also a wonderful source of information. There is no need to duplicate the information on all the web sites we use as sources of information on a daily basis, but only to make the links available of all these web sites”.*

It is further interesting to note from Table 4.2-5 above that 40% of the questionnaire respondents strongly agreed that librarians have the necessary skills required to use knowledge sharing technologies while 44% agreed. Mixed views, on the other hand, were gathered from the managers regarding the question of whether the librarians in

their sections have the competencies necessary for them to apply knowledge sharing technologies (cf. Appendix B, question 18). Below are their responses:

*“No, they do not have them”*

*“Yes, they do”*

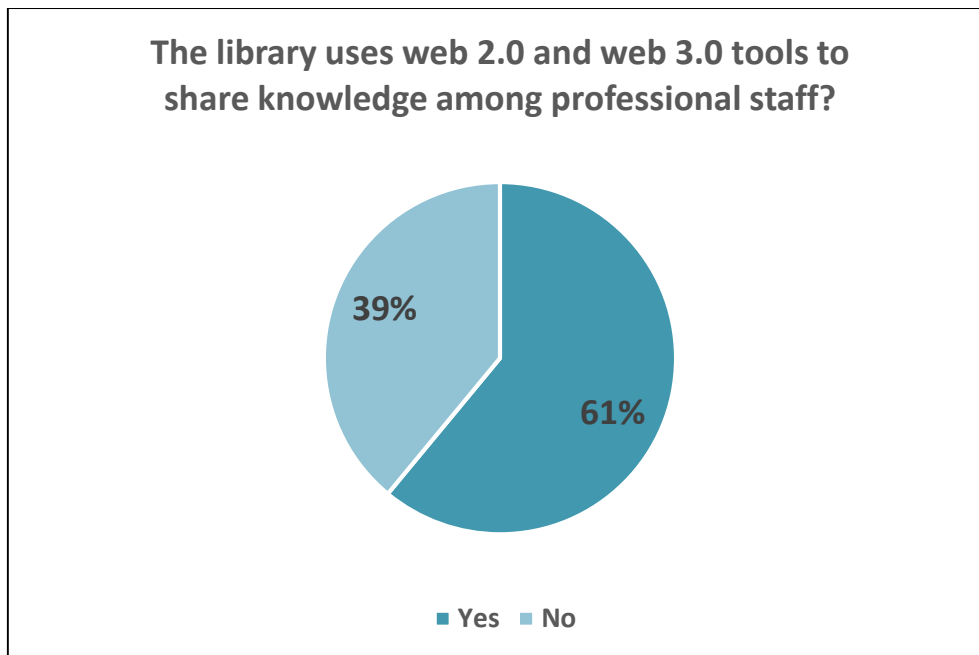
*“Some staff have the skills and some don’t, some are not interested in IT”*

*“Many librarians went for training over the past few years, they should have the competencies but they are not practicing it. They do not like to put something in writing. They would rather pick up the phone to explain and discuss what they want. All these tools are about writing, to put your thoughts in writing - interacting and engaging via writing. This is my personal perception and experience”.*

*“Some are, but most are simply not interested in IT related stuff”.*

#### **4.2.4.2.      *The use of web 2.0 and web 3.0 tools***

The respondents were asked whether web 2.0 and web 3.0 tools were used in the library to share knowledge among professional staff (cf. Appendix A, question 15). Figure 4.2-7 below shows that 61% of them responded in the affirmative while 39% did not think so.



**Figure 4.2-8: Use of web 2.0 and web 3.0 tools in the Unisa library**

The respondents were then further asked to mention the specific tools used. Out of the 61% who responded positively to the previous question 19% failed to mention any web 2.0 or web 3.0 tool. One respondent commented, “Aware of them but cannot specifically name them”, while 12% just wrote “Social media”. In fact only 12% mentioned either wikis or blogs which - besides Google docs – are the two web 2.0 tools that are currently being used in the Unisa Library to share knowledge among professional staff. The rest of the respondents, i.e. 48%, simply listed a list of the tools that they know, regardless of what they are used for, e.g. Facebook, Twitter, YouTube, etc.

## 4.2.5. Resources and Processes that enable knowledge sharing

### 4.2.5.1. *Resources to facilitate knowledge sharing*

The purpose of this section was to find out whether the respondents believed that the resources in the library were sufficiently adequate to facilitate knowledge sharing. (cf. Appendix A, question16). As Table 4.2-6 below indicates, most of them agreed with the statement that the financial resources were sufficient to cultivate a sound knowledge culture (28% strongly agreed and 51% agreed). However, 5% disagreed while 14% were undecided.

**Table 4.2-5: Adequacy of resources to facilitate knowledge sharing**

Resource	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Financial resources	12 (28%)	22 (51%)	6 (14%)	2 (5%)	1 (2%)
Human resources	11 (26%)	23 (53%)	6 (14%)	2 (5%)	1 (2%)
Computers	20 (47%)	22 (51%)	1 (2%)	0 (0%)	0 (0%)
Informal meeting rooms	11 (26%)	19 (44%)	7 (16%)	6 (14%)	0 (0%)

The responses regarding the question that sought to discover the adequacy of human resources to enable knowledge sharing in the library followed the same positive trend.

The researcher wanted to establish, for instance, whether there were a sufficient number of experts in various areas of work that could share knowledge with less knowledgeable staff.

Almost all of the respondents agreed that the library has adequate computers to facilitate knowledge sharing. In fact, 47% strongly agreed with the statement while 51% agreed.

It is also important that staff have informal meeting rooms (e.g. tea rooms, chat rooms) where they can informally share knowledge. It is evident from Table 4.2-6 above that 44% of the respondents agreed with the statement and 26% strongly agreed, while only 14% disagreed.

#### **4.2.5.2. *Processes and activities that facilitate knowledge sharing***

As can be seen from Table 2.4-7 below, the respondents were asked to rate the usage of various activities and processes that could facilitate knowledge sharing in the Unisa Library (cf. Appendix A, question 17). The results indicate that the respondents felt that some of these knowledge sharing vehicles were used extensively while others were barely used. For instance, a significant majority of the respondents thought that the following forums were frequently used to facilitate knowledge sharing among professional staff:

- meetings (60% strongly agreed and 33% agreed);
- workshops, forums, and seminars (35% strongly agreed and 53% agreed);

- written, oral or visual reports (17% strongly agreed and 55% agreed).

Just over half the respondents felt that brainstorming sessions were used to share knowledge (9% strongly agreed and 42% agreed). Staff rotation, in contrast, was the least used method for sharing knowledge (9% strongly agreed and 16% agreed).

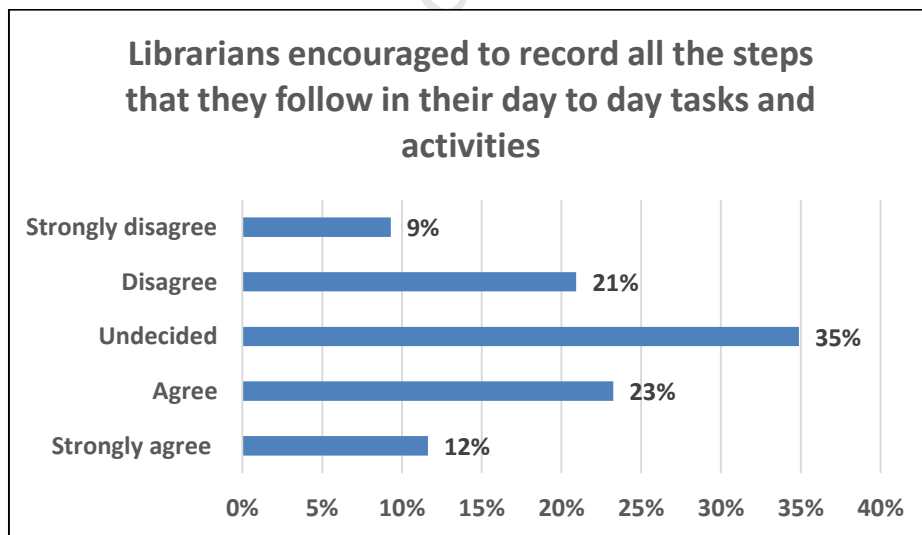
**Table 4.2-6: Knowledge sharing processes and activities**

Forum	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
<b>Workshops/Forums/Seminars</b>	<b>15</b> <b>(35%)</b>	<b>23</b> <b>(53%)</b>	<b>2</b> <b>(5%)</b>	<b>3</b> <b>(7%)</b>	<b>0</b> <b>(0%)</b>
<b>Brainstorming sessions</b>	<b>4</b> <b>(9%)</b>	<b>18</b> <b>(42%)</b>	<b>13</b> <b>(30%)</b>	<b>5</b> <b>(12%)</b>	<b>3</b> <b>(7%)</b>
<b>Meetings</b>	<b>14</b> <b>(33%)</b>	<b>26</b> <b>(60%)</b>	<b>3</b> <b>(7%)</b>	<b>0</b> <b>(0%)</b>	<b>0</b> <b>(0%)</b>
<b>Written, oral or visual reports</b>	<b>7</b> <b>(17%)</b>	<b>23</b> <b>(55%)</b>	<b>6</b> <b>(14%)</b>	<b>6</b> <b>(14%)</b>	<b>0</b> <b>(0%)</b>
<b>Staff rotation</b>	<b>4</b> <b>(9%)</b>	<b>7</b> <b>(16%)</b>	<b>13</b> <b>(30%)</b>	<b>10</b> <b>(23%)</b>	<b>9</b> <b>(22%)</b>

According to Skyrme (2001: 25) organisations that recognise the importance of knowledge sharing have used knowledge for the improvement of their internal processes which usually results in better services being offered. Simply put “Knowledge can also be embedded in the organisational practices, routines, and

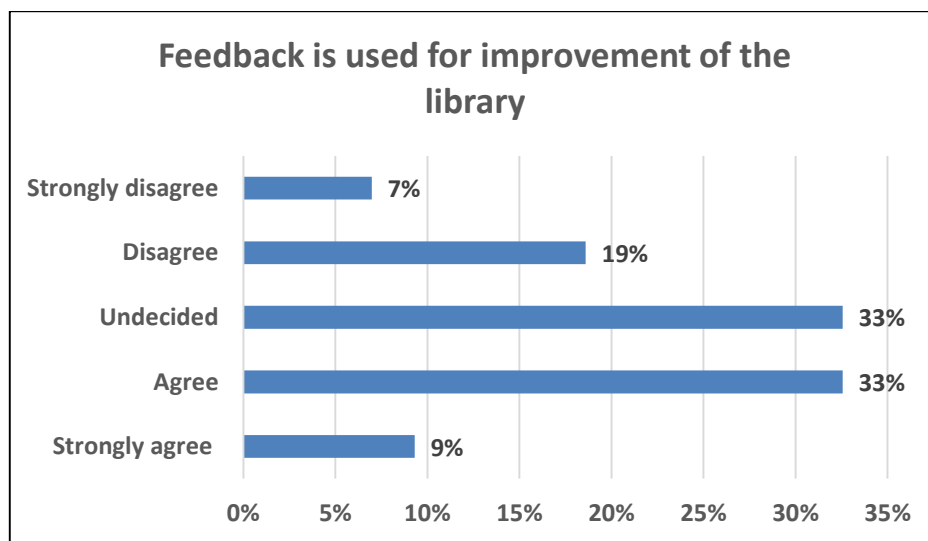
processes" (Lee, 2003: 45). To this end the researcher posed the question as to whether librarians are encouraged to record all the steps that they follow in their day to day tasks and activities and whether feedback from knowledge sharing sessions are kept and used later for the improvement of library services (cf. Appendix A, questions 18-19). The responses to these questions are depicted in Figure 4.2-8 and Figure 4.2-9 below.

As illustrated in Figure 4.2-9 below only about a third of the respondents felt that librarians are encouraged to record all the steps that they follow in their day to day tasks and activities (23% agreed and 12% strongly agreed). About a third of the responses were undecided (35%), while the remaining third provided a negative response (21% disagreed and 9% strongly disagreed).



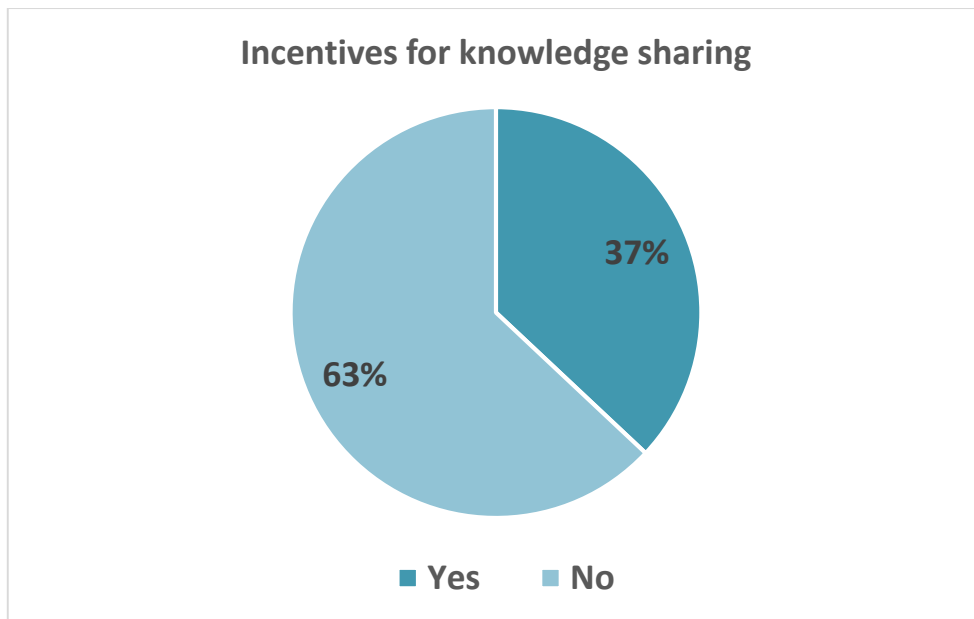
**Figure 4.2-9: Are librarians encouraged to record all the steps that they follow in their day to day tasks and activities?**

Figure 4.2-10 shows that the respondents were more positive with regard to the use of minutes from meetings and feedback from workshops to improve the library (33% agreed, 9% strongly agreed, 33% were undecided, 19% disagreed and 7% strongly disagreed).



**Figure 4.2-10: The use of feedback for improvement of the library**

On whether the library provided incentives to encourage knowledge sharing among staff (cf. Appendix A, question 20), 63% respondents disagreed while 37% indicated that there were incentives in place for staff who practice knowledge sharing (See Figure 4.2-11 below).



***Figure 4.2-11: Library has incentives to encourage knowledge sharing***

When it came to the second part of the question where they needed to mention the type of incentives that the library provides, nine of the fifteen respondents who responded in the affirmative in the first part of the question mentioned performance bonuses with one respondent stating that “the performance bonus could be an incentive to promote knowledge sharing”. Recognition of achievements by a supervisor and opportunities to attend conferences were also cited by some respondents.

## **4.2.6. Further aspects relating to knowledge sharing**

### **4.2.6.1. *Activities to encourage knowledge sharing***

Respondents were further asked to provide ideas on the types of activities that they consider necessary in order to encourage knowledge sharing among librarians in the Unisa Library (cf. Appendix A, question 21; Appendix B, question 19). Some of the activities that were listed by the respondents included:

- library forums,
- establishing blogs,
- tea time meetings to share ideas,
- staff meetings,
- staff rotation,
- a journal club,
- communities of practice,
- a debating club,
- workshops similar to the Information Technology (IT) week that occurs annually in the library,
- brainstorming sessions,
- information / reporting sessions across departments,
- colloquiums,
- repository / knowledge-base of procedures of tasks,
- regular show and tell sessions,

- mentoring,
- peer training,
- feedback sessions from conference attendance,
- improved working relations among librarians from the various directorates of the library, as well as,
- the promotion of the idea of knowledge sharing by leadership.

Some respondents however cited some concerns. For instance, one respondent stated,

*“management must not encourage ‘only some librarians’ to do exclusive tasks”*,

while another respondent wrote,

*“every individual should be acknowledged for their contribution”*.

Three respondents also alluded to the fact that trust among librarians should be cultivated through exercises like teambuilding in order to encourage easy knowledge sharing among them.

The question relating to activities that can encourage knowledge sharing was also posed during the interviews and the following are the most pertinent responses that were given:

*“We must acknowledge staff for their contributions and expertise; this will make them feel good about themselves. We should encourage staff to mentor each other in the section so that they can share their knowledge”*

*“Establishing communities of practice (CoPs), investing on retired librarians, and also acknowledging staff expertise”*

*“I think the Library should allow time for the presentation of reports after attending a conference or workshop so as to share with their colleagues who could not attend these. Another way would be to have a space in the library where experts in certain fields of interest would be invited to do some presentations of their own the research that they are busy with or have completed.*

*Staff should be allowed some time to engage in debates about the developments in their field of interest in the Library World. This would encourage innovation”*

*“Workshops, exhibitions, brainstorming sessions, informal conversations, Colloquiums”*

*“I believe the annual Library Technology Event provides an ideal opportunity to share knowledge and so far I think it full filled that objective. Unfortunately it is most of the time the same staff members who present and actively participate in discussions.*

*Workgroups also provide opportunities to share knowledge but some staff members are not using the opportunity as such. They just attend because they have been told to do so”.*

*“Show & tell sessions, informal working groups, CoPs, Presentations, and Town Hall meetings”.*

#### **4.2.6.2. Benefits of knowledge sharing**

With regards to the benefits of knowledge sharing (cf. Appendix A, question 22, Appendix B, question 20), most respondents mentioned better informed staff which in turn leads to better service delivery. Some respondents pointed out that there is less duplication of tasks and further that working methods improve. The result, some say, is a collegial and creative working environment characterised by shared values and the absence of silos. Some respondents stated that staff will also be encouraged to learn more, while others reported that expertise and knowledge from staff who either resign or retire will be retained. Two respondents also mentioned that staff would be able to stay abreast of new developments due to the sharing of knowledge among themselves. Finally, one respondent mentioned that an environment where knowledge is shared is an environment “*where staff exude confidence in the execution of their duties*”.

The middle managers echoed similar sentiments to their colleagues. This is evident from their responses that are listed below:

*“The knowledge will be shared within the department and not with one person. If anybody decides to leave it will not be a problem because they are all equipped with the necessary knowledge and resources”.*

*“This would encourage staff to take interest in their field of profession, encourage innovation and enlighten them about the latest developments and challenges”.*

*“Innovative ideas will surface which will ultimately result in a better and more relevant service. Staff will feel more empowered”.*

*“Personal development of staff by broadening their knowledge and insight into library services and processes. Knowledge and understanding is spread among many staff members”.*

*“Everybody learns and no knowledge gets lost and also the library will become an incubator for more and better knowledge”.*

#### **4.2.6.3. Barriers to effective knowledge sharing**

With regard to factors that are perceived to be barriers to the successful sharing of knowledge among professional staff (cf. Appendix A, question 23; Appendix B, question 21), the majority of respondents mentioned working in silos, people’s attitudes, lack of time, as well as lack of communication between departments. A number of respondents also mentioned absence of commitment from management in terms of allowing for creative space, time and resources for knowledge sharing. They also cited lack of transparency which then results in the absence of trust that in turn exacerbates competitiveness among colleagues.

Three respondents indicated that ignorance of the benefits that accrue from knowledge sharing and which is usually a reciprocal experience can be an impediment. They further mentioned that job insecurity – that is, the mistaken belief that sharing knowledge lessens one’s impact and worth - and lack of incentives can also lead to hoarding of knowledge. One respondent wrote, *“affirmative action proposes a threat to white colleagues”*, while another one claimed that it was unclear what the mentorship programme that was introduced in the library had achieved due

to lack of feedback on the process. *“Territoriality”* and *“indifference to the impact of losing knowledgeable staff due to the fallacy that staff are dispensable”* was quoted by another respondent as barriers of knowledge sharing in the Unisa Library.

Below are the responses that were gathered from the interviews regarding barriers to knowledge sharing:

*“People simply don’t want to share what they know with other colleagues”.*

*“Silos, sheer self-centredness, time, incentives, job description oriented, the past that will always come to the fore in discussions, e.g., statements like, “in the past we used to.....”*

*“Time is the greatest obstacle. If only this would be accepted as contribution towards the development of the professional librarian, it would flourish and we would have well trained, up to date librarians”*

*The culture is not conducive to knowledge sharing, in terms of communication, trust, etc. among staff. IPMS has a negative effect on knowledge sharing in that people turn to be competitive. Not enough time.*

*Lack of motivation and willingness by staff to participate in knowledge sharing activities. Many staff members do not realise that by serving on a workgroup or committee, project team, participating in listserv/blog discussions, etc., they will have the opportunity to learn, share knowledge and broaden their knowledge and insight into their area of responsibility or the library in general.*

*Competiveness among some sections therefore they are not sharing knowledge easily with other sections.*

*“Age difference, race, male vs female, diversity are some of the barriers. People also fear losing the knowledge that they have”*

### **4.3. Further discussion of the interview findings**

This section covers comments received during the interviews that have not been incorporated in Section 4.2 above. It is clear from the responses received that the managers held a number of contradictory views regarding various aspects of knowledge sharing at the Unisa library.

On the one hand, the majority of interview respondents stated that the general attitude of the Unisa Library (i.e. that of the leadership) was positive towards knowledge sharing (cf. Appendix B, questions 3 and 4). They, for example, mentioned that innovation is always encouraged among staff and that *“individual departments encourage sharing of knowledge acquired at conferences”*. The interview respondents indicated that although knowledge sharing mostly happens on an informal basis, a number of more formal initiatives do exist. Examples they cited included the colloquia idea that is being planned for 2013, college teams and various forums and workgroups. One interviewee also stated, *“due to the nature of our responsibilities we have to share knowledge in order to ensure that library staff can help themselves and understand the systems and technology they are using on a daily basis”*.

It was further clear that the middle managers felt that there is some level of knowledge sharing between the librarians working in the Unisa Library and outside organisations (cf. Appendix B, question 9). For instance as one respondent stated,

*“we attend system user group meetings / conferences, participate in listserv discussions, etc”.*

Another one indicated that

*“we work together with the Advocacy and Resource Centre for Students with Disabilities (ARCSWiD) regarding assistive technology and we also share experiences regarding services to the disabled with other organisations, such as the University of Pretoria and Stellenbosch University, National Council for the Blind. We have also forged relationships with Multi-Purpose Community Centres that help to give internet access to students from disadvantaged communities who cannot come to the library”.*

The library also has representatives in workgroups such as SANLic where professional librarians are encouraged to share best practices.

Another positive aspect that emerged from the interviews was that, albeit informally, managers did encourage experts in various areas of work to share knowledge with their colleagues (cf. Appendix B, question 10). Most of this sharing occurs during weekly departmental meetings and also on a one on one basis. However, one respondent did indicate that staff members' performance, interests and competencies were monitored on an on-going basis and valuable knowledge would then be shared with other members of staff. Another interviewee commented,

*“I recognise skills in certain areas and encourage staff to participate in show and tell sessions, while I also ensure that I assign tasks that are related to their area of expertise / skills. Furthermore I encourage them to write articles and present papers at conferences”.*

On the question of how the knowledge gained from conferences, seminars and workshops is shared among staff (cf. Appendix B, question 11), all the interviewees agreed that there were no formal systems in place, but that it happens informally within departments. In fact all the respondents indicated that this kind of feedback mostly occurs during their regular departmental meetings.

There was, however, in contradiction to the above also considerable negative feedback from the managers regarding knowledge sharing. The questions relating to whether there is a strong knowledge sharing culture amongst the staff in the Unisa library (cf. Appendix B, question 6) produced responses that were mostly negative. One respondent for example stated "*no, it does not happen in my directorate, people work in silos*". This negative view was further emphasised by three of the middle managers who pointed out that there were no formal knowledge sharing policies in place (cf. Appendix B, question 1) and in their view this was an indication that knowledge sharing is not taken seriously. The middle managers further also stated that they were not aware that any knowledge audit exercises had ever taken place in the Unisa Library (cf. Appendix B, question 2).

The responses to the question whether the library had systems in place that enabled internal and external knowledge sharing (cf. Appendix B, question 17) were divided. Three of the respondents felt that the library was not really doing anything, one respondent was unsure while the other three had positive views. The mentorship programme that has recently been introduced was mentioned as an indication that the library was heading in the right direction. To support this, another respondent claimed that presentations are sometimes given on an ad hoc basis on various areas of work

when the need arises. She also mentioned the annual IT week workshop which has been running for the past three years.

With reference to the question that asked what kinds of incentives could be introduced to encourage knowledge sharing, all the interviewees indicated that while there were presently no incentives in operation they thought they should be implemented (cf. Appendix B, question 22). Acknowledgement during performance assessment sessions and which is performance bonus linked was mentioned as a desired incentive by three respondents. Another interviewee cited awards like “The Librarian of the Year” award as an example of an incentive that can be used to encourage staff to share knowledge. Another respondent listed attendance of international conferences as a possible reward, while another one believed that special acknowledgement from the Library Executive Team would serve as of encouragement to staff. On the other hand, one interviewee felt that knowledge sharing should form part of one’s work ethic and that people should not expect to be rewarded for it.

#### **4.4. Differentiation of interview responses according to directorates**

In this section the responses from the questionnaire are differentiated according to the four directorates in which the respondents worked. The four directorates were Client Services (CS), Information Resources Content Management (IRCM), Information Resources Distribution (IRD), and Library Technology Services (LTS).

#### **4.4.1. Leadership factors and knowledge sharing**

Table 4.4-1 below outlines the questionnaire responses with regard to the leadership factors that impact on knowledge sharing as differentiated according to the directorate where the librarians work in the Unisa library (cf. Appendix A, question 1). It can be seen that whereas the majority (63%) of the Information Resources Distribution librarians thought that the Unisa has policies in place that encourage knowledge sharing, the other categories were less positive by mostly either disagreeing or not being sure.

With regard to whether the organisational structure of the library encourages knowledge sharing, only the respondents from Client Services were fairly positive (50% agreed with the statement) while the remaining categories mostly disagreed. While the majority of respondents from all the categories did not think that there were systems in place to capture tacit knowledge, the IRD librarians felt the most strongly that this was not true.

**Table 4.4-1: Leadership factors and knowledge sharing**

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
<b>1. There are policies that encourage knowledge sharing</b>					
<b>Overall</b>	0 (0%)	12 (28%)	19 (44%)	11 (26%)	1 (2%)
<b>CS</b>	0 (0%)	3 (17%)	10 (55%)	5 (28%)	0 (0%)
<b>IRCM</b>	0 (0%)	4 (25%)	7 (44%)	4 (25%)	1 (6%)
<b>IRD</b>	0 (0%)	5 (63%)	2 (25%)	1 (13%)	0 (0%)
<b>LTS</b>	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)
<b>2. The organisational structure of the library allows for ease of knowledge sharing</b>					
<b>Overall</b>	0 (0%)	17 (40%)	7 (16%)	18 (42%)	1 (2%)
<b>CS</b>	0 (0%)	9 (50%)	3 (17%)	6 (33%)	0 (0%)
<b>IRCM</b>	0 (0%)	6 (38)	2 (13)	7 (44%)	1 (6%)
<b>IRD</b>	0 (0%)	2 (25%)	1 (12,5%)	5 (63%)	0 (0%)
<b>LTS</b>	0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)
<b>3. The library has a system in place to ensure that knowledge from experienced staff who leave is retained</b>					
<b>Overall</b>	0 (0%)	4 (9%)	11 (26%)	19 (44%)	9 (21%)
<b>CS</b>	0 (0%)	2 (11%)	5 (28%)	9 (50%)	2 (11%)
<b>IRCM</b>	0 (0%)	2 (13%)	4 (25%)	8 (50%)	2 (12.5%)
<b>IRD</b>	0 (0%)	0 (0%)	2 (25%)	2 (25%)	4 (50%)
<b>LTS</b>	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)

#### **4.4.2. Culture that promotes knowledge sharing**

It can be seen from Table 4.4-2 below that most of the respondents felt that there is a good level of knowledge sharing among staff in their respective directorates (cf. Appendix A, question 4). The librarians from the IRD directorate were the most positive (63% strongly agreed and 25% agreed) while those from the IRCM directorate were the least positive (31% disagreed and 6% strongly disagreed with the statement).

When it came to the question whether knowledge is generally shared among staff in the work situation (cf. Appendix A, question 5), most of the respondents from IRCM and IRD were positive (respectively 56% agreed and 6% strongly agreed; 25% strongly agreed and 25% agreed), most of the respondents from Client Services were ambivalent (44%), while the one respondent from LTS disagreed. The group of respondents who were the most inclined to think that knowledge hoarding occurs among colleagues were the IRCM and IRD respondents (respectively 19% strongly agreed, 31% agreed; 50% agreed). The one respondent from LTS also strongly agreed with this statement. The respondents from Client Services were less inclined to think that knowledge hoarding takes place in the Unisa Library.

While most respondents felt that knowledge that is essential to their work was readily available, it is clear that the respondents in IRD were the most positive about this statement (25% strongly agreed and 75% agreed). However, the one respondent from LTS disagreed with the statement. It can be seen that most respondents believed that there is sharing of feelings and perceptions about work related issues in the Unisa Library and that the respondents from IRD and LTS were the most positive about this aspect (respectively 38% strongly agreed and 38% agreed; 100% agreed).

**Table 4.4-2: Culture that promotes knowledge sharing**

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
<b>4. There is a good level of knowledge sharing among librarians in my section</b>					
Overall	10 (23%)	19 (44%)	5 (12%)	7 (16%)	2 (5%)
CS	2 (11%)	10 (56%)	3 (17%)	2 (11%)	1 (6%)
IRCM	3 (19%)	6 (38%)	1 (6%)	5 (31%)	1 (6%)
IRD	5 (63%)	2 (25%)	1 (13%)	0 (0%)	0 (0%)
LTS	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)
<b>5. In the work situation, knowledge is generally shared among staff</b>					
Overall	4 (10%)	18 (40%)	13 (31%)	6 (14%)	2 (5%)
CS	1 (6%)	7 (39%)	8 (44%)	1 (6%)	1 (6%)
IRCM	1 (6%)	9 (56%)	4 (25%)	1 (6%)	1 (7%)
IRD	2 (25%)	2 (25%)	1 (13%)	3 (38%)	0 (0%)
LTS	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)
<b>6. There is hoarding of knowledge among colleagues</b>					
Overall	5 (12%)	14 (33%)	15 (35%)	9 (21%)	0 (0%)
CS	1 (6%)	5 (28%)	7 (39%)	5 (28%)	0 (0%)
IRCM	3 (19%)	5 (31%)	5 (31%)	3 (19%)	0 (0%)
IRD	0 (0%)	4 (50%)	3 (38%)	1 (13%)	0 (0%)
LTS	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>7. Knowledge that is essential to my work is readily available</b>					
Overall	9 (21%)	24 (57%)	6 (12%)	3 (7%)	1 (2%)
CS	2 (11%)	13 (72%)	2 (11%)	1 (6%)	0 (0%)
IRCM	5 (31%)	5 (31%)	4 (25%)	1 (6%)	1 (6%)
IRD	2 (25%)	6 (75%)	0 (0%)	0 (0%)	0 (0%)
LTS	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)
<b>8. There is sharing of feelings and perceptions about work issues among colleagues</b>					
Overall	8 (19%)	20 (48%)	10 (21%)	4 (10%)	1 (2%)
CS	1 (5.5%)	10 (55.5%)	5 (28%)	2 (11%)	0 (0%)
IRCM	4 (25%)	6 (38%)	4 (25%)	1 (6%)	1 (6%)
IRD	3 (38%)	3 (38%)	1 (13%)	1 (13%)	0 (0%)
LTS	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)

### 4.4.3. Technology that enables knowledge sharing

It is evident from Table 4.4.-3 below that hardly any of the respondents disagreed with the statement that the Unisa library has appropriate technologies to facilitate knowledge sharing. The only variation among the views of the respondents in the various directorates was the intensity with which they agreed with the statement, the most positive being the respondents from IRD (63% strongly agreed) and Client Services (55% strongly agreed) as well as the one respondent from LTS strongly agreeing.

**Table 4.4-3: Technology-related factors**

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
<b>12. The library has technologies that are needed to facilitate knowledge sharing</b>					
Overall	20 (47%)	22 (51%)	0 (0%)	1 (2%)	0 (0%)
CS	10 (55%)	7 (39%)	0 (0%)	1 (6%)	0 (0%)
IRCM	4 (25%)	12 (75%)	0 (0%)	0 (0%)	0 (0%)
IRD	5 (63%)	3 (38%)	0 (0%)	0 (0%)	0 (0%)
LTS	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>13. Technology that can be used to capture and store relevant knowledge for librarians is available</b>					
Overall	19 (44%)	18 (42%)	3 (7%)	3 (7%)	0 (0%)
CS	8 (44%)	9 (50%)	1 (6%)	0 (0%)	0 (0%)
IRCM	6 (38%)	8 (50%)	1 (6%)	1 (6%)	0 (0%)
IRD	4 (50%)	1 (13%)	1 (13%)	2 (25%)	0 (0%)
LTS	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>14. Librarians have the skills needed to use knowledge sharing technologies</b>					
Overall	17 (40%)	19 (44%)	4 (9%)	3 (7%)	0 (0%)
CS	8 (44%)	7 (39%)	3 (17%)	0 (0%)	0 (0%)
IRCM	6 (38%)	8 (50%)	0 (0%)	2 (13%)	0 (0%)
IRD	2 (25%)	4 (50%)	1 (13%)	1 (13%)	0 (0%)
LTS	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

It can again be seen that all the directorates were positive that the Unisa library has adequate technologies to capture and store relevant tacit knowledge. There was only a slight variation in intensity with the most positive category being the respondents from Client Services (44% strongly agreed and 50% agreed) as well as the one person from LTS who strongly agreed. It can, furthermore, be seen that almost all the respondents also felt that librarians in the Unisa Library have the necessary skills to use knowledge sharing technologies. The variation among the categories is again very low with the most positive being the librarians in IRCM, that is other than the one person in LTS strongly agreeing with the statement.

#### **4.4.4. Resources that enable knowledge sharing**

It can be seen from Table 4.4-4 below that in terms of the question asking the respondents whether they thought the Unisa Library has sufficient financial resources to facilitate knowledge sharing the respondents from IRCM were significantly more positive than the other categories (38% strongly agreed and 56% agreed). That is other than the one person from LTS that strongly agreed with the statement.

As far as human resources or experts in various areas of work were concerned the IRCM and IRD as well as the one LTS respondents were significantly more positive than those from Client Services (respectively 25% strongly agreed and 69% agreed; 50% strongly agreed and 38% agreed). Furthermore, almost all the respondents from the four directorates were of the opinion that there were adequate computers that can be used to share knowledge. In fact only one respondent from IRCM was not sure. It

can further be seen that while the majority of the respondents were of the opinion that the Unisa Library provides adequate informal meeting rooms where knowledge can be shared, the Client Service respondents were the most positive (17% strongly agreed and 61% agreed), that is other than the one LTS respondent that strongly agreed.

**Table 4.4-4: Adequacy of resources to facilitate knowledge sharing**

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
<b>16a. Adequate financial resources</b>					
<b>Overall</b>	12 (28%)	22 (51%)	7 (16%)	1 (2%)	1 (2%)
<b>CS</b>	4 (22%)	9 (50%)	5 (28%)	0 (0%)	0 (0%)
<b>IRCM</b>	6 (38%)	9 (56%)	1 (6%)	0 (0%)	0 (0%)
<b>IRD</b>	2 (25%)	3 (38%)	1 (13%)	1 (25%)	1 (13%)
<b>LTS</b>	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)
<b>16b. Adequate human resources (experts)</b>					
<b>Overall</b>	12 (28%)	23 (53%)	6 (14%)	2 (5%)	0 (0%)
<b>CS</b>	4 (22%)	8 (44%)	5 (28%)	1 (6%)	0 (0%)
<b>IRCM</b>	4 (25%)	11 (69%)	1 (6%)	0 (0%)	0 (0%)
<b>IRD</b>	4 (50%)	3 (38%)	0 (0%)	1 (13%)	0 (0%)
<b>LTS</b>	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)
<b>16c. Adequate computers</b>					
<b>Overall</b>	20 (47%)	22 (51%)	1 (2%)	0 (0%)	0 (0%)
<b>CS</b>	7 (39%)	11 (61%)	0 (0%)	0 (0%)	0 (0%)
<b>IRCM</b>	7 (44%)	8 (50%)	1 (6%)	0 (0%)	0 (0%)
<b>IRD</b>	5 (63%)	3 (38%)	0 (0%)	0 (0%)	0 (0%)
<b>LTS</b>	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>16d. Informal meeting rooms (tea, chat, etc.)</b>					
<b>Overall</b>	11 (26%)	19 (44%)	7 (16%)	6 (14%)	0 (0%)
<b>CS</b>	3 (17%)	11 (61%)	3 (17%)	1 (5%)	0 (0%)
<b>IRCM</b>	4 (25%)	6 (38%)	4 (25%)	2 (13%)	0 (0%)
<b>IRD</b>	3 (38%)	2 (25%)	0 (0%)	3 (38%)	0 (0%)
<b>LTS</b>	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

#### **4.4.5. Processes that enable knowledge sharing**

It can be seen from Table 4.4-5 below that the respondents from Client Services and IRCM were far more positive than the IRD and LTS librarians that the Unisa library arranges sufficient workshops, seminars and other forums to facilitate knowledge sharing (respectively 27% strongly agreed and 67% agreed; 44% % strongly agreed and 50% agreed). The Client Services and IRCM librarians were once again more positive than the IRD and LTS librarians that brainstorming sessions are organised to facilitate knowledge sharing (respectively 6% strongly agreed and 50% agreed; 19% strongly agreed; 38% agreed).

A greater majority of IRCM and IRD than Client Services and LTS librarians were of the opinion that sufficient written, oral, and visual reports are created as tools to assist with knowledge sharing at the Unisa library (respectively 31% strongly agree, 50% agree; 13% strongly agree; 63% agree).

While the majority of the IRCM and IRD librarians, felt that staff rotation, an important knowledge sharing process, was not happening in the library the Client Services librarians were fairly ambivalent and the LTS librarian, in contrast, was very positive that it does occur (respectively 31% strongly disagree, 19% disagree; 13% strongly disagree; 38% disagree).

**Table 4.4-5: Adequacy of processes to facilitate knowledge sharing**

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
<b>17a. Sufficient workshops/forums/seminars</b>					
Overall	15 (35%)	23 (53%)	2 (5%)	3 (7%)	0 (0%)
CS	5 (27%)	12 (67%)	0 (0%)	1 (6%)	0 (0%)
IRCM	7 (44%)	8 (50%)	1 (6%)	0 (0%)	0 (0%)
IRD	3 (38%)	3 (38%)	0 (0%)	2 (25%)	0 (0%)
LTS	0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)
<b>17b. Sufficient brainstorming sessions</b>					
Overall	4 (9%)	18 (42%)	13 (30%)	4 (9%)	4 (9%)
CS	1 (6%)	9 (50%)	6 (33%)	1 (6%)	1 (6%)
IRCM	3 (19%)	6 (38%)	5 (31%)	2 (13%)	0 (0%)
IRD	0 (0%)	3 (38%)	2 (25%)	1 (13%)	2 (25%)
LTS	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)
<b>17d. Adequate written, oral, &amp; visual reports</b>					
Overall	8 (19%)	22 (51%)	6 (14%)	7 (16%)	0 (0%)
CS	2 (11%)	9 (50%)	5 (28%)	2 (11%)	0 (0%)
IRCM	5 (31%)	8 (50%)	1 (6%)	2 (13%)	0 (0%)
IRD	1 (13%)	5 (63%)	0 (0%)	2 (25%)	0 (0%)
LTS	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)
<b>17e. Staff rotation</b>					
Overall	4 (9%)	7 (16%)	13 (30%)	10 (23%)	9 (21%)
CS	0 (0%)	5 (28%)	6 (33%)	4 (22%)	3 (17%)
IRCM	2 (13%)	1 (6%)	5 (31%)	3 (19%)	5 (31%)
IRD	1 (13%)	1 (13%)	2 (25%)	3 (38%)	1 (13%)
LTS	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>18. Librarians are encouraged to record all the steps that they follow in their daily tasks</b>					
Overall	5 (12%)	10 (23%)	15 (35%)	9 (21%)	4 (9%)
CS	1 (5%)	5 (28%)	7 (39%)	5 (28%)	0 (0%)
IRCM	2 (13%)	4 (25%)	7 (44%)	1 (6%)	2 (13%)
IRD	1 (13%)	1 (13%)	1 (13%)	3 (38%)	2 (25%)
LTS	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>19. Minutes of meetings and feedback from workshops are kept and used for the improvement of the library</b>					
Overall	4 (9%)	14 (33%)	14 (33%)	8 (19%)	3 (7%)
CS	1 (6%)	8 (44%)	6 (33%)	2 (11%)	1 (6%)
IRCM	2 (13%)	4 (25%)	6 (38%)	3 (19%)	1 (6%)
IRD	1 (13%)	2 (25%)	2 (25%)	2 (25%)	1 (13%)
LTS	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)

On the question of whether librarians are encouraged to record all the steps that they follow in their daily tasks it can be seen that while on the one hand the LTS librarian was very positive that it does occur, the IRD librarians did not think so (25% strongly disagree; 38% disagree) and the Client Services and IRCM librarians were ambivalent. While half of the respondents from Client Services felt that minutes of meetings and feedback from workshops are kept and used for the improvement of the library Services (6% strongly agreed; 44% agreed), only 38% of the respondents from both IRCM and IRD were positive that this occurred. The LTS librarian disagreed with the statement.

#### **4.5. Concluding remarks**

The analysis indicated areas of concern from professional librarians with regards to the knowledge sharing maturity levels at the Unisa Library. These included lack of formalized strategies and policies that pertain to encouraging knowledge sharing among staff. The prevailing culture of the organisation and the processes were also among some of the challenges that were highlighted. The analysis of the results by directorate, although showing considerable variation per question asked, did not provide a clear pattern of responses according to directorate.

In the next chapter the outcome of the survey and the conclusions reached will be discussed in greater detail. Recommendations on the way forward for the Unisa library will further also be provided.

## **CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS**

### **5.1. Introduction**

This chapter will outline the deductions and conclusions made from the analysis of the data that were collected from the respondents. Recommendations on how to address the issues will further also be provided. As stated, the aim of the research project was to investigate knowledge sharing practices within the Unisa Library. This was carried out by establishing the extent to which the library staff utilize Knowledge Management (KM) tools to share knowledge, albeit unknowingly, in their day to day activities. Opinions on the use of these knowledge sharing tools were also solicited from the heads of the various sections of the library. The focus of this chapter is thus on the issues and concerns that surfaced both during the interviews and from the data collected through questionnaires.

These issues and concerns will be discussed within the context of the critical knowledge sharing themes that formed the basis of the questionnaire as well as the interviews with the heads of sections.

### **5.2. Discussion based on critical knowledge sharing factors**

It was clear during the data collection and analysis phases that in certain instances there were differences in how the professional librarians in the various directorates perceive knowledge sharing and the factors relating to knowledge sharing. Furthermore there were sometimes distinct differences between how the more senior

library staff and the professional librarians view issues. The conclusions relating to the various themes and differences in responses will be discussed in the following sections. The researcher will further outline recommendations relating to these issues.

### **5.2.1. Leadership factors and knowledge sharing**

In terms of leadership it was apparent that while most of the questionnaire respondents indicated conflicting feelings about whether there was a formalized knowledge sharing policy in the Unisa Library, most of the senior respondents indicated that no such a policy exists (see 4.2.2.1. In other words the library lacked a clearly defined and communicated knowledge sharing strategy, even though some respondents mentioned mentoring as one of the vehicles that the library uses to share knowledge. However, with reference to the recently instituted mentorship initiative there was a general feeling that people were not really aware of its progress in terms of whether it was succeeding or failing owing to the absence of feedback about the whole process.

Connelly and Kelloway (2003: 295) emphasize the fact that support and commitment from management is one of the key elements that can result in a positive knowledge sharing culture in an organisation. Jack Welch in Kermally (2002: 95), further, refers to good leaders as those leaders who “create vision, articulate the vision, passionately own the vision, and relentlessly drive it to completion”. Thus, it is clear to the researcher that the library needs a well-defined knowledge management framework within which a sound knowledge sharing strategy is outlined. It is further important that such a strategy is aligned with the overall vision, aims and objectives of the library.

It was stated in Chapter 2 that the best organisations worldwide have moved away from hierarchical structures and instead are organised more horizontally to ensure that individual intellect and knowledge is recognised and that they are leveraged to create value for the organisation. Nonaka, Von Krogh, and Voelpel (2006: 1189) refer to these as 'heterarchy' organisational forms, where "assets, talent and leadership are dispersed and communication is horizontal". In such organisations people get together to solve problems or tackle projects that crop up, and in the process share tacit knowledge. The idea is based on the notion that no single individual knows everything. A flexible organisational structure, therefore, facilitates knowledge sharing and collaboration across boundaries within the organisation (Quinn, Anderson, and Finkelstein, 1998: 188).

The results, as indicated in Chapter 4.2.2.2, show that the questionnaire respondents were fairly ambivalent as to whether the organisational structure of the library was conducive to knowledge sharing. It is suggested by the researcher that this uncertainty can be related to the lack of a knowledge sharing strategy and she, therefore, strongly recommends that these issues should be addressed by the leadership of the Unisa library.

It further is obvious from the study that there is no system in place to ensure that tacit knowledge from staff who resign or retire is retained. This was supported both by the results from the questionnaire and the information collected through the interviews (see 4.2.2.3). The importance of retaining an individual's tacit knowledge was clearly outlined in Chapter 2 and the researcher, therefore, strongly recommends that the library should devise a strategy that incorporates a knowledge retention strategy and

policies to ensure that knowledge that is embedded within peoples' minds is not lost to the organisation when they leave

### **5.2.2. Organisational culture that promotes knowledge sharing**

It emerged from the data collected that the professional librarians felt that the library's organisational culture in general does promote knowledge sharing, that knowledge is shared in the library (cf. 4.2.3.1.) and that the work environment supports the sharing of feelings, ideas and perceptions (cf. 4.2.3.4.). The professional librarians were further very positive that the essential knowledge that they require to execute their duties is readily available (cf. 4.2.3.3.). An additional factor that shows that knowledge sharing is stimulated is that a large majority (74%) of the respondents belong to internal knowledge sharing groups in the library and 50% belong to external professional networks (cf. 4.2.3.5).

This is a positive finding since the researcher strongly agrees with Jones, Cline and Ryan (2006: 414) that a culture of collaboration rather than isolation among staff results in more motivated individuals, which in turn leads to effective and efficient organisations. In other words the work environment plays a vital role in determining the level of motivation that staff in an organisation display.

Although it is encouraging that the librarians generally feel that knowledge sharing occurs amongst the staff, the researcher is concerned that respondents from certain directorates (cf. Chapter 4, Section 4.4) were less positive about knowledge sharing than others. This, it is suggested, demonstrates the existence of subcultures within the

library. This was also evident from the interviews with the middle managers where it became clear that knowledge sharing in the library occurs in an unstructured fashion and mainly because of the initiatives of managers from the different section. This generally occurs by means of weekly meetings and show and tell sessions. Even though this indicates that informal knowledge sharing is prevalent, it is recommended that the Unisa Library should institute a more formalized and regularized structure to facilitate knowledge sharing processes. It is important that knowledge sharing is embedded in peoples' jobs so that it forms part of their everyday work life.

It is, furthermore, alarming that a large proportion of the respondents thought that knowledge hoarding occurs amongst the professional staff (33% agreed and 12% strongly agreed). There was very little variation among the directorates with regard to these results other than the Client Services librarians who were slightly more positive about whether hoarding takes place or not (cf. 4.2.3.2. and 4.4.2).

Management should, therefore, create an environment where trust prevails. The organisational culture should encourage collaboration among the professional staff to ensure that ideas and innovation are exchanged and shared amongst colleagues. In other words, it is the responsibility of leadership to ensure that staff are motivated to create, store, share, and transfer knowledge among each other within an atmosphere of trust where individuals do not feel the need to hoard knowledge. It is recommended that these aspects should be captured in the library's knowledge sharing strategy and policy documents.

### **5.2.3. Technology that enables knowledge sharing**

As discussed in Chapter 2 technology usually plays a vital role in the sharing of knowledge in organisations, even though many technology experts and academic scholars have observed a lack of correlation between technology and KM (Malhotra, 2000: 1). Be that as it may, the intranet has been considered as one of the tools that can be used to encourage individuals to contribute to a knowledge sharing culture (Van der Walt, van Brakel, and Kok, 2004: 1).

It was evident that the professional librarians are of the opinion that the library has adequate technologies that could enable knowledge sharing and knowledge capturing. However, the data from the interviews was far less positive and indicated a number of concerns (cf. Section 4.2.4.1). For instance it became clear that although the intranet was used as a knowledge sharing tool, it was not that effective as it is not regularly updated.

It is therefore suggested that the Unisa Library should put measures in place to ensure that the intranet is not only regularly updated but effectively used as a knowledge sharing tool. The library should further investigate the use of other IT tools to enable knowledge sharing and to facilitate the capturing and storing of relevant tacit knowledge. For example it should investigate how Unisa's new ECM system can be used for collaboration (amongst others in-house blogs and wikis) and to create knowledge repositories.

The results further indicated that a large majority of the questionnaire respondents believed that most librarians have the skills to use knowledge sharing technologies (cf.

Section 4.2.4.1). The interviews, again, revealed that the middle managers believe that librarians at the Unisa Library are not sufficiently skilled in using such technologies. It was stated that, although the staff are sent for training in the use of IT, this has not always resulted in staff using IT tools. In fact, it was noted during the interviews that a considerable number of these librarians are just not interested in electronic mediated interaction, they prefer personal communication.

It is further clear that the majority of respondents, although indicating that they used web 2.0 and web 3.0 tools, were very vague about the precise nature of the specific tools they used (cf. 4.2.4.2.). This is despite the fact that the Unisa library currently uses blogs, wikis and Google Docs for communication and collaboration purposes.

Consequently, the researcher recommends that it is imperative that the leadership of the Unisa library should not only ensure that all librarians are given appropriate training in using knowledge sharing tools, but they should also ensure that the learned skills are put into good practice.

#### **5.2.4. Resources that enable knowledge sharing**

It is clear from the survey that a large majority of the respondents hold the view that the library has adequate financial resources and computers to facilitate knowledge sharing (cf. 4.2.5.1.). This would include the acquisition of the necessary tools and technologies (both hardware and software) as well as developing and maintaining knowledge sharing practices. It is, therefore, recommended that the library management should ensure that these financial resources are made available and

appropriately applied to create an effective knowledge capturing, storing, sharing and transfer system.

In Chapter 2 it was argued that most organisations have immense sources of untapped tacit knowledge (Hauschild, Licht and Stein, 2001: 71). In essence, many organisations do not know how to ensure that tacit knowledge that is embedded within people's minds is shared with others to facilitate interactive learning. In other words experts in various areas of work should be encouraged to share their knowledge and expertise so that skills are transferred to the less knowledgeable. The data from the survey indicated that a large majority of the respondents held the view that the library has adequate human resources from which knowledge can be tapped (cf. Section 4.2.5.1). This means that the respondents recognize the availability of experts in various areas of work who can, if the environment permits, share what they know with others.

Connely and Kelloway (2003: 295) suggest that in an organisation where a positive culture prevails there is usually good interaction and socialization amongst staff as well as between leadership and the rest of the staff. Furthermore, in such an environment, people get to know their colleagues' strengths and areas of expertise. Thus organisations who have realized the value of social action at work through informal personal communication have introduced "talk rooms" where staff are expected to spend some time talking about their work.

The survey results (Section 4.2.5) further showed that the majority of the respondents from all the directorates held the view that there were adequate spaces or informal

meetings rooms where librarians can meet to share knowledge. However whether knowledge sharing does take place in these informal meeting rooms is not clear. Thus library management has a duty to make sure that the informal meeting rooms are not only inviting but that they also encourage staff to make use of them for knowledge exchange.

#### **5.2.5. Processes that enable knowledge sharing**

As shown in Chapter 4 (cf. Section 4.2.5) it would seem that besides meetings; workshops, seminars and forums are the most used tools for sharing knowledge in the Unisa Library. Professional librarians belong to various forums that focus on different aspects of the library work, albeit some respondents cited lack of openness at some of the forums.

It is suggested therefore that management find ways in which they can ensure that there is trust among professional librarians across all directorates so that they find it easy to impart and exchange what they know with others. One way to do this would be to acknowledge the contributions made from all groups regardless of their level. It is also imperative that leadership emphasize the importance of the role played by all towards the achievement of the objectives of the library. In other words the environment should be conducive to providing fruitful collaboration that inspires healthy teamwork. Thus, it would help to ensure that individuals have an insight on what other professionals in other directorates do and how the different work-related tasks connect.

As discussed in Chapter 2 organisations that recognize the importance of knowledge sharing have used knowledge for the improvement of their internal processes which usually results in better services offered (Skyrme, 2001: 25). To this end respondents were asked whether they were encouraged to record the steps that they follow in their everyday tasks and activities, and the results of the survey were fairly ambivalent. Although the respondents were on the whole more positive with regard to the use of minutes from meetings and feedback from workshops to improve library services, there were significant variations according to directorates. Therefore it is recommended that the leadership of the library consider investing in a knowledge base or repository where all these minutes are kept for easy retrieval when they are required. This knowledge base can also be used to store all the recorded steps of tasks and activities so as to avoid duplication and in turn save time. This knowledge base can also serve as a useful tool that would ensure that required information is readily available to new staff as well as existing staff who need it.

#### **5.2.6. Incentives to encourage knowledge sharing**

It emerged from the data that was collected that the library does not really have a clear policy on providing incentives to encourage knowledge sharing. It was further indicated during the interviews, for instance, that because of the lack of a knowledge sharing strategy and policies, there were no formalized incentives that are linked to knowledge sharing.

According to Tiwani (2002: 60) one of the enablers of knowledge sharing is a reward system where people are compensated for transferring knowledge to the less knowledgeable. The results of the survey also showed that the respondents have ideas on what they believe could be used as incentives for knowledge sharing. These include recognition of their achievements by their supervisors, and being given an opportunity to attend conferences. A few other views, which the researcher would like to endorse, was put forward during the interviews. These were performance bonus linked acknowledgement during performance assessment sessions as well as recognition by means of the “Librarian of the year” award.

#### **5.2.7. Knowledge sharing activities**

In Chapter 2 it was stated that Von Krogh, Nonaka, and Abel (2001: 427) mention the leveraging strategy as an important component of a sound KM strategy. Thus they claim that when the need for new or more knowledge is identified in an organisation the first step is to ensure that the already existing knowledge is used to maximum advantage. Knowledge workshops, for instance, should be used to share knowledge and in the process repetitive mistakes would be prevented as well as the chances of ‘re-inventing the wheel’. A further benefit would be that tasks and activities would be standardized and consolidated and this would result in increased efficiency in the organisation.

The researcher further concurs with the respondents that the following knowledge sharing activities should be implemented at the Unisa Library:

Workshops that are similar in structure to those held during the annual Information Technology (IT) week; library forums and colloquiums; blogs to exchange knowledge; informal meetings to share ideas; more formal staff meetings wherein ideas are shared; project-specific brainstorming sessions; information reporting sessions across departments, e.g. feedback sessions after conference attendance; staff rotation; a journal club; communities of practice (CoPs); a debating club; repository of task procedures; regular show and tell sessions; mentoring and peer training; and improved working relations among librarians from the various directorates of the library.

From the researcher's point of view, the most important factor that would ensure a knowledge sharing environment would be the promotion as well as monitoring of the idea of knowledge sharing by leadership.

#### **5.2.8. Barriers to knowledge sharing**

The results of the survey highlighted a number of factors that could inhibit the successful implementation of good knowledge sharing practices at the Unisa Library. The aspect that was specifically emphasized was the problem of working in silos. Further impediments that were mentioned by the respondents were people's attitudes, time constraints, lack of incentives as well as lack of communication between departments. A significant barrier that was mentioned is the absence of commitment from management in terms of allowing for creative space, time and resources for knowledge sharing. Respondents also cited lack of transparency which then results in

absence of trust that in turn encourages competitiveness and territoriality among colleagues.

Thus it is recommended that the leadership of the library should investigate all these factors and in turn address them in a way that will make staff understand the benefits that can be gained from transferring knowledge. For example this would ensure that there is less duplication of tasks, efficiency and speed in completing tasks, a collegial and creative working environment, a breakdown of working in silos, a confident staff complement, as well as retention of tacit knowledge from individuals who either resign or retire from the library. A culture that is conducive to the sharing of knowledge should therefore be encouraged.

### **5.3. Discussion and conclusions with reference to the study's research questions**

This section will deal with the individual research questions that emanated from the objectives of the study and which served as a framework for the study. The aim, therefore, is to discuss the extent to which the study answered these questions.

- Are the Unisa librarians aware of the existence and benefits of knowledge sharing practices?

Although the results of the study revealed that the respondents were not very clear about the practices, tools and techniques that can be used to capture, store and disseminate knowledge, most seemed to be aware of its benefits.

- Do the Unisa library staff have a knowledge sharing culture?

The results of the survey indicated that even though there was a considerable amount of knowledge sharing among professional librarians - albeit informally and mostly within directorates – a library-wide culture of knowledge sharing did not exist. In fact it became obvious from the open ended questions (cf. Appendix A, question 23; Appendix B, question 21) that people were mostly working in silos. Moreover the leadership of the library was not really perceived as being fully committed to making sure that knowledge is transferred from knowledgeable persons or experts to the less knowledgeable.

The structure of the organisation was also not seen as conducive to the seamless sharing of knowledge. Issues such as peoples' attitudes, territoriality and lack of transparency were specifically mentioned as barriers that make it difficult for knowledge to flow easily throughout the organisation.

- Does the library's infrastructure provide an enabling environment for knowledge sharing?

Most respondents believed that the library has access to adequate technology to make effective knowledge sharing activities possible. However it also emerged from the interviews that existing networks like the intranet are not utilized to their full capacity as they are not updated regularly and that many librarians do not know how to use the various technologies.

- Does the library capture and store the knowledge of its staff?

It was apparent from the results of the study that there is no system in place to ensure that the procedures relating to the daily tasks of the librarians are recorded and kept for future use. However, a majority of the respondents were more positive about minutes of meetings and feedback from workshops being used to improve the library service. Furthermore, although the data from the survey showed that the respondents believe that there are adequate technologies that can be used to capture and store knowledge, the results from the interviews indicated that this was not happening at the moment. In fact, even the intranet which could serve as a valuable knowledge sharing platform and repository is not regularly updated.

- Do the middle managers believe that the librarians have the competencies necessary for them to apply knowledge management tools in their sections?

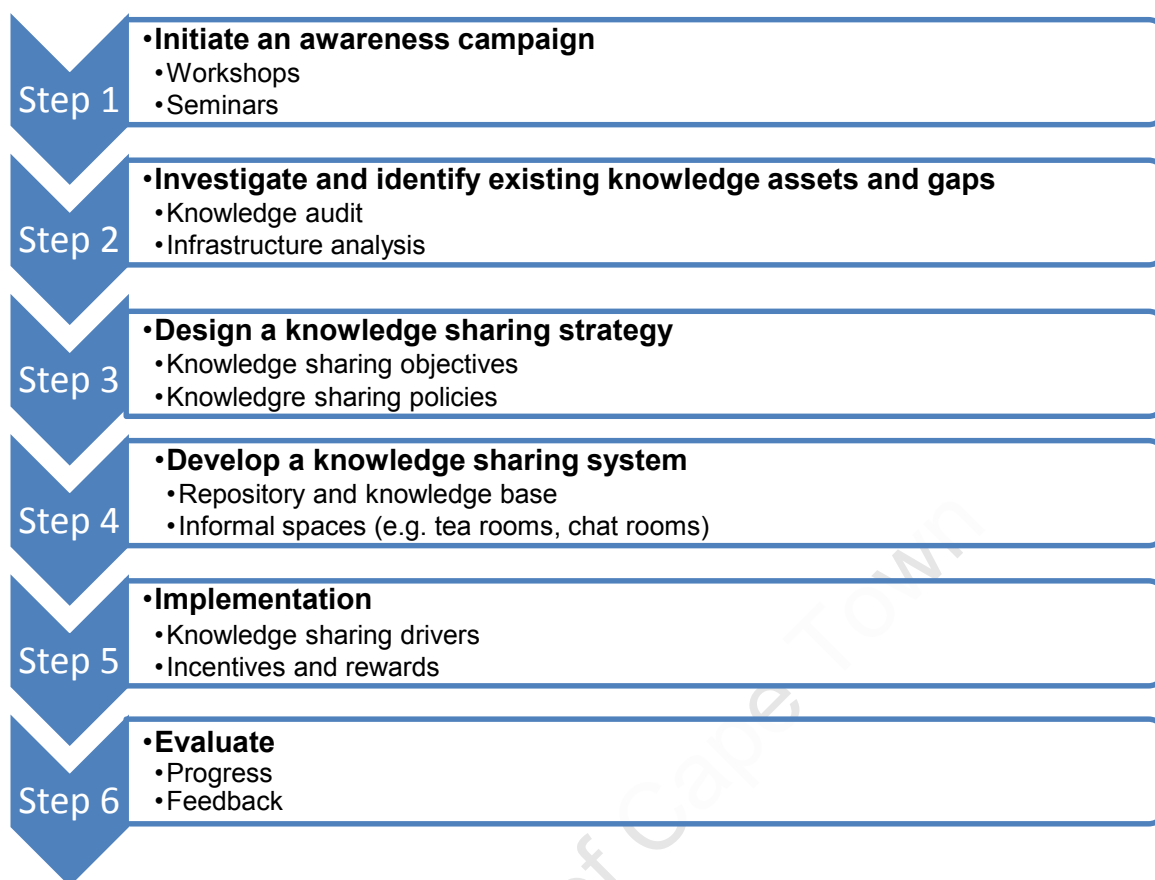
Although there were mixed views about this from the more senior staff, the general feeling was however that not many librarians have the necessary skills to use knowledge sharing technologies. In fact it surfaced from the interviews that even the ones that have attended training sessions on knowledge sharing technologies including web 2.0 and web 3.0 tools do not use that knowledge, while some are simply not interested in anything related to IT.

#### **5.4. Recommendations to ensure better knowledge sharing**

It became clear from the results of the survey that, although knowledge sharing is occurring, it is fairly unstructured and individualised. The Unisa Library, therefore, has much ground to cover before it reaches a stage where knowledge is shared freely and

in a structured way. It is clear that a culture and environment that is more conducive to knowledge sharing should be promoted. The staff should be sufficiently motivated and encouraged to ensure the smooth transfer of knowledge among all staff. The barriers to knowledge sharing that have been identified have to be addressed. This would include creating an environment of trust among the professional librarians themselves and for the leadership to commit to ensuring that both the structure and the culture of the library ensures that relevant tacit knowledge is captured, stored, shared and transferred within the library. Essentially, library management needs to make sure that there is not only an adequate infrastructure but that all staff are made aware of the importance of knowledge sharing, that the benefits are outlined and that it becomes an integral part of the work ethic.

The researcher therefore proposes that the steps outlined in the road map in Figure 5.1 below should be followed to attain a satisfactory level of knowledge sharing at the Unisa Library



*Figure 5.4-1: Knowledge sharing road map*

The steps outlined in the roadmap will be discussed in greater detail in the sections below.

#### **5.4.1. Initiate an awareness campaign**

It is imperative for management to obtain the buy-in of the staff in order to achieve a successful knowledge sharing culture. In other words the advantages and benefits of sharing of knowledge among librarians should be clearly stipulated. This should be done to guarantee cooperation among staff during all the phases of the development

of a sound knowledge sharing model. As argued in Chapter 2, this requires visionary leadership and motivated staff. Many organisations have ensured the latter by involving the staff in brainstorming sessions to decide on the shape and direction of their organisation. In essence the staff are encouraged to share their perception of best practice for their organisation and how to benchmark against other organisations. Such a participative process ensures that the most crucial problem areas are identified and remedial actions introduced.

#### **5.4.2. Investigate and identify existing knowledge assets and gaps**

The researcher believes that the next step should be to conduct a knowledge audit that would specifically investigate the availability of valuable and useful knowledge in the library. The knowledge could be explicit, that is, already coded and stored somewhere within the library systems, or tacit, which is knowledge that is embedded within the minds of the staff. Furthermore, knowledge gaps should also be identified. In other words, it is imperative to establish exactly what knowledge and information resources are available in the library while at the same time finding out what is lacking, i.e. what the library 'does not know which needs to be known'. The library management should take the responsibility of playing the lead role in the performance of this knowledge audit. A major component of such an audit would be an analysis of the existing structural and technological infrastructure.

### **5.4.3. Design a knowledge sharing strategy**

Designing a sound knowledge sharing strategy would be the next logical phase. Care should thus be taken to make certain that the strategy and policies relating to it are aligned to the existing Library Operational Plan. In other words there should be a clear connection between the organisational strategy of the library as well as the knowledge sharing strategy. This must be accompanied by clearly defined objectives and outcomes.

The researcher further believes at this stage there should be incentives and rewards associated with knowledge sharing that should be clearly stipulated. In this way the staff will know what is expected of them, and consequently be motivated to share what they know with others.

### **5.4.4. Develop a knowledge sharing system**

Information technology (IT) is one of the enablers of knowledge sharing. Therefore, when developing and designing a knowledge sharing system the library should amongst others invest in adequate information technology resources that can be used to capture, store and disseminate knowledge. To this end, the researcher proposes that an institutional repository that is accessible to all librarians should be created at the Unisa Library. This repository should contain both existing explicit knowledge and newly captured tacit knowledge that is work related and which contains the kind of information that the librarians need to work more effectively. Additionally a knowledge base of experts within the library (i.e. an expertise locator) should be created to direct

librarians to individuals who are knowledgeable. The information technology should further be more effectively used to enable interaction and collaboration.

The intranet is one of the existing knowledge sharing vehicles in the Unisa Library that should be enhanced and frequently updated to ensure that it is relevant to staff needs. It became apparent during the study that it was not utilised to its full capacity as it is not frequently updated. Training should also be provided for librarians so that they can gain skills that will help them in using these technologies.

Spaces should be provided, both formal and informal, where the transfer of knowledge can occur in an inviting environment. It is further important that library management should, in addition to creating the right physical environment, also put measures in place that will encourage the transfer of work-related knowledge from experts to the less knowledgeable.

Processes and activities that inspire knowledge sharing should therefore be introduced. The annual IT week that is already in place can serve as a good example of new events that can be organised in different areas of expertise where experience and knowledge can be exchanged. Care should further be taken that all forums and committees that already exist or that will be set up in future are effective knowledge exchange platforms. An environment should be created where communication among individuals is open and knowledge can be freely exchanged. This again requires intervention from management who should ensure that there is transparency which will lead to trust among librarians.

The mentoring programme that the library has already started is an important step in the right direction to ensure that knowledge and skills are transferred in the library. It, however, became apparent during the survey that many respondents were either not aware of the programme, or were not clear whether it was succeeding or not. This is an indication that the mentoring programme needs fine tuning and better communication and feedback processes with regard to its objectives and progress. In essence all these processes must be based on the objectives set out in the knowledge sharing strategy.

#### **5.4.5. Implementation**

The next step would be to ensure that the knowledge sharing strategy is enforced. However it is important that the groundwork has been done during the awareness campaign stage so that the strategy together with the policies relating to it is well received. Moreover, it is imperative that the objectives and outcomes are clearly defined so that the staff know exactly what is expected of them. It would also help to have an individual or a group of individuals that have experience in or are conversant with knowledge management to drive the implementation process.

It is during this stage that the repository and knowledge base are implemented and populated; i.e. a start should be made to capture, store, disseminate and make readily available work-related knowledge and information. Furthermore, the physical knowledge sharing spaces that have been provided should be used.

Thus, as discussed in Chapter 2 the library should devise means to ensure that knowledge is disseminated as quickly and as efficiently as possible throughout the organisation. As mentioned, this will include a variety of approaches which could include direct and indirect communication means; e.g. written, oral, and visual reports, personnel interaction that could include mentoring, rotation programmes, and training programmes.

Management should further during this stage ensure that there are procedures in place that will inspire the application of acquired knowledge. In addition, knowledge sharing incentives and rewards should be clearly outlined in policy documents. This can amongst others include monetary rewards in the form of performance bonuses, the opportunity to attend conferences, including knowledge sharing as one of the criteria to receive the 'librarian of the year award', and acknowledgement from line managers and senior management.

#### **5.4.6. Evaluate**

Finally, it is important to measure the effect of the implementation of the knowledge sharing strategy. Therefore the individual or group of persons who have been assigned to drive the project will have to evaluate if there has been any value added since its inception. In other words, did the investment put into the process have any positive returns and further has it been effective in terms of meeting the set objectives of knowledge sharing? For instance it might help to establish if the level of satisfaction of library clients has changed. Moreover the state and perceptions of the librarians

themselves can be a good indication of whether the strategy is working. In other words, constant feedback mechanisms should be established and metrics would have to be developed against which performance enhancement will be measured.

### **5.5. Suggestions for future research**

The study was confined to collecting data from professional staff and middle managers in the Main Library of the Unisa Library system. The researcher held the view that these staff members would be sufficiently representative of the entire Unisa library system. She, however, proposes that this assumption should be tested by extending the study to all the branches and to all senior management levels. This would ensure a more comprehensive assessment of the views and perceptions towards knowledge sharing practices in the Unisa library system. It would further provide greater confidence that the proposed knowledge sharing strategy can be applied to all the branches of the library. Moreover further investigation should be conducted after the implementation of the proposed knowledge sharing strategy to ascertain what the impact has been on knowledge sharing practices and the quality of library services.

### **5.6. Final conclusion**

The study revealed that the library does not have a clearly defined knowledge sharing strategy and policy. Furthermore, even though there is a fair amount of knowledge sharing among librarians, this occurs at a more informal level. It was further established that the organisational culture at the library is presently not very conducive

to knowledge sharing activities. The researcher therefore proposed a road map that outlined the steps that should be followed to attain a satisfactory level of knowledge sharing at the Unisa Library as well as an environment where there is an open transfer of knowledge from experts to the less knowledgeable. It was further argued that for this to succeed, senior management would have to promote the process and outline the importance of knowledge sharing activities for the Unisa Library. It was further suggested that incentives should be instituted to ensure effective knowledge sharing.

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# APPENDIX A: Questionnaire on knowledge sharing practices in the Unisa Library

Dear Respondent

I am conducting research for my M Bibl at the University of Cape Town on knowledge sharing practices in university libraries. I would appreciate it if you could please assist by completing the questionnaire below on exploring knowledge sharing practices in the Unisa Library.

Please note that your responses will be treated with utmost anonymity and that the outcomes will be used for the purposes of this research project only.

Thank you

Nozzi Mayekiso

Please provide the following information:	
Your Position in the Unisa library	
Directorate you work in	
Position of immediate supervisor	
Number of years in the Unisa Library	

Please read through each of the following statements and then mark the box that best describes your response.
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<b>Leadership and knowledge sharing</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Undecided</b>	<b>Disagree</b>	<b>Strongly disagree</b>
1. There are policies that encourage knowledge sharing in the Unisa Library.					
2. The organisational structure of the library allows for ease of knowledge sharing among all professional staff.					
3. The library has a system in place to ensure that knowledge from experienced staff, who either resign or retire, is retained.					

<b>Knowledge sharing Culture</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Undecided</b>	<b>Disagree</b>	<b>Strongly disagree</b>
4. There is a good level of knowledge sharing among librarians in my section.					

5. In the work situation knowledge is generally shared among staff.					
6. There is hoarding of knowledge among colleagues.					
7. Knowledge that is essential to my work is readily available.					
8. There is sharing of feelings and perceptions about work issues among colleagues.					

	Yes	No
9. Do you belong to a workgroup / committee either inside or outside the library where knowledge is shared?		

10. If yes, what is the name of the group and what kind of knowledge is shared?

.....

.....

	Yes	No
11. Do you belong to a professional network outside Unisa where knowledge is shared?		

If yes, what is the name of the group and what kind of knowledge is shared?

.....

.....

Technology and knowledge sharing	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree
12. The library has adequate Information and Communication Technologies (ICTs) that facilitate knowledge sharing (e.g. the intranet, telephone, emails, the internet, etc).					
13. The library has adequate Information and Communication					

Technologies (ICTs) that can be used to capture and store explicit knowledge and subsequently make it accessible to librarians (e.g. repositories, databases, etc).					
14. Librarians have the skills needed to use knowledge sharing technologies (computers, telephones, emails, the internet, web 2.0 and 3.0 tools as well as social networking tools).					

	Yes	No
15. The library uses web 2.0 tools and web 3.0 tools to share knowledge among professional staff.		

If yes, which web 2.0 and web 3.0 tools are used to share knowledge?

.....

.....

<b>Knowledge sharing Resources / Processes</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Undecided</b>	<b>Disagree</b>	<b>Strongly disagree</b>
16. The library has adequate resources to facilitate knowledge sharing.					
a. financial resources					
b. human resources (e.g., experts in various areas of work)					
c. computers					
d. informal meeting rooms (e.g. chat, tea, etc)					
e. Any other, please specify.....					
17. There are activities and processes that are necessary for sharing knowledge.					
a. workshops / seminars / forums					
b. brainstorming sessions					
c. meetings					
d. written, oral and visual reports					

e. staff rotation					
f. Any other, please specify .....					
18. Librarians are encouraged to record all the steps that they follow in their day to day tasks and activities.					
19. Minutes of meetings and feedback from workshops are kept and used later for the improvement of library services.					

	Yes	No
20. The library provides incentives to encourage knowledge sharing among its staff (e.g., included in performance management).		

If yes, what type of incentives?

.....

.....

21. What activities do you think can encourage knowledge sharing among librarians?

.....

.....

22. What do you think the benefits, if any, of knowledge sharing are?

.....

.....

23. What factors do you feel are barriers towards attaining a successful knowledge sharing culture in the library?

.....

.....

University of Cape Town

## **APPENDIX B: Interview schedule on knowledge sharing practices in the Unisa Library**

Dear Respondent

I am conducting research for my M Bibl at the University of Cape Town on knowledge sharing practices in university libraries. I would appreciate it if you could please assist by completing the questionnaire below on exploring knowledge sharing practices in the Unisa Library.

Please note that your responses will be treated with utmost anonymity and that the outcomes will be used for the purposes of this research project only.

Thank you

Nozzi Mayekiso

Obtain the following information:	
Position	
Number of years in the Unisa Library	
Date of interview	

Leadership and knowledge sharing

1. Is there a written knowledge sharing policy in the library?

2. Does the library engage in audit exercises to establish what knowledge exists, who has it and how it flows (or doesn't) through the library?
3. Is the library committed to sharing of knowledge both internally and externally?
4. What is the attitude of the library towards knowledge sharing?
5. How does the library ensure that the knowledge embedded in people's minds is not lost when they resign or retire?

#### Culture and knowledge sharing

6. Is there a strong culture of knowledge sharing in the library?
7. Is there any knowledge sharing happening among the professional staff in your section?
8. Is there any knowledge sharing happening between your section and professional staff from other departments in the library?
9. Is there any sharing of knowledge that occurs between librarians in your department and outside organisations?
10. Do you identify staff in your section that possess a certain type of expertise and ensure that this knowledge is shared among all?
11. How do you ensure that the knowledge gained by staff from attending seminars / conferences / workshops outside the library is shared among colleagues?
12. Do you belong to a workgroup / committee either internally or externally where knowledge is shared?
13. If yes, what type of knowledge is shared in the workgroup / committee?

#### Technology / tools / resources that enable knowledge sharing

- 14.** Is knowledge sharing enabling technology available and accessible?
- 15.** Is there a system to capture and store internal knowledge?
- 16.** Is there a system to capture and store external knowledge?
- 17.** Is there a system to share both internal and external knowledge among staff?
- 18.** Do you feel that the librarians in the library have the competencies necessary for them to apply knowledge management tools (e.g. the intranet, web 2.0 and web 3.0 tools, etc) in their sections?

#### General

- 19.** What activities do you think can encourage knowledge sharing among librarians?
- 20.** What do you think the benefits of knowledge sharing are?
- 21.** What do you think the barriers to knowledge sharing are?
- 22.** What types of incentives do you think can encourage knowledge sharing among librarians in the library?

# APPENDIX C: Letter seeking approval to conduct the study at the Unisa Library



University of Cape Town

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## Library and Information Studies Centre

Room 5, L-5, Chancellor Oppenheimer Library

**Email:** jaya.raju@uct.ac.za

**Fax:** (021) 650-2965

**Tel:** (021) 650-3091

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Dr Buhle Mbambo-Thata  
Executive Director,  
Dept of Library Services,  
PO Box 392,  
Unisa, 0003

Dear Dr Mbambo

**Masters research project: Ms Nozzi Mayekiso: Request to distribute questionnaires and conduct interviews in the Unisa main library**

As you probably know, Nozzi Mayekiso is registered for the Master's in Library and Information Science degree at the University of Cape Town.. Her research title is: **"Knowledge sharing in academic libraries with special reference to the Unisa Library"**.

We would like to request your authorisation that she conducts her empirical data collecting among the staff of the Unisa Library. Ethical clearance was granted for her research project by the UCT Humanities Faculty when she registered earlier this year.

Kind regards

Associate Professor Jaya Raju  
Head: Library and Information Studies Centre

Dr Gretchen Smith  
Supervisor