PERCEPTIONS OF DURBAN UNIVERSITY OF TECHNOLOGY LIBRARIANS ON WHETHER KNOWLEDGE MANAGEMENT WILL IMPROVE THEIR EFFECTIVENESS.

Patrick Mbongwa Mhlongo

Graduate School of Business and Leadership Studies at the University of KwaZulu-Natal, Westville campus.

UNIVERSITY OF KWAZULU-NATAL

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by

Patrick Mbongwa Mhlongo

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Supervisor: Dr A Kader

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LIST OF ABRIVIATIONS

CoP   :   Communities of Practice

DUT   :   Durban University of Technology

HESA   :   Higher Education South Africa

KM   :   Knowledge-management

KZN   :   KwaZulu-Natal

LO   :   Learning Organisation

OL   :   Organisational Learning

UKZN   :   University of KwaZulu-Natal

UoT   :   University of Technology

DECLARATION

I, Patrick Mbongwa Mhlongo, hereby declare that this research project is the result of my own investigation. It has not been submitted in part or in full for any other qualification or to any other institution of higher learning.

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My family, for instilling in me excellent values and the confidence to explore and discover new knowledge.

DEDICATION

I dedication this research project to:

My family, for their support and understanding in ensuring the successful completion of this research project.

Abstract

Academic libraries are confronted by a number of complex challenges as a result of relentless change which comes at an accelerated rate. Academic libraries play an important role in the Universities of Technology (UoTs). Challenges in the higher education sector have a direct impact on the way in which academic libraries operate. Factors affecting UoTs include transformation, technological advances, stakeholder demands, budget cuts, and changes in government policies. Responding effectively to such challenges has become critical for academic libraries. Academic libraries are part of the universities they serve, and they are under pressure to align their services to strategic goals of parent institutions. Besides that, academic libraries are under continuous scrutiny to prove their worth, especially when it comes to budget allocations. Knowledge-management has been identified as the best approach for organisations to continuously improve services and products for the purposes of achieving competitive advantage. The literature strongly emphasises that for organisations to remain competitive, continuous creation-sharing and effective utilization of organisational knowledge is critical. The purpose of this study was to determine the perceptions of Durban University of Technology (DUT) library employees on whether implementation of knowledge-management will improve their effectiveness. Knowledge-management is traditionally used in the corporate sector, however, this study looks at knowledge-management from an academic library perspective. It is important to mention that knowledge-management has not been implemented in the DUT library. Knowledge-management practices empower organisations with dynamic capabilities with which to exploit collective wisdom, as they pursue excellence and efficiency.

The study captures the concept of knowledge-management in the context of academic libraries, particularly libraries within the UoTs. Data for this study was collected from library employees of the DUT library. A self-administered questionnaire was used as a data-collection instrument. Computer software known as SPSS version 20 was used for data-analysis purposes.

The findings of this research project reveal that participants are of the view that knowledge-management will assist the DUT library to achieve its strategic objectives. The results also indicate that participants are more than willing to embrace and support the implementation of knowledge-management in the DUT library. The literature confirms that knowledge-management philosophy influences the motivation for pursuing excellence through effective use of organisational knowledge.

The study highlights knowledge-management from the DUT library perspective, however, the findings of this study may well be relevant to other libraries within the UoTs and traditional universities.

Organisational knowledge is regarded as a strategic resource for modern organisations to remain competitive. Knowledge management philosophy is receiving attention from public and private organisations as they have to deal with complex challenges. From the findings of this study, knowledge management philosophy will play a critical role to help DUT library achieve its strategic objectives.

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Chapter 1

1 **Introduction**

Responding effectively to customer needs and global challenges is critical for modern organisations. Academic institutions are operating in an environment in which they must deal with a number of challenges. Highlighting the challenges faced by academic libraries, Doan and Kennedy (2009:348) stress that academic libraries must keep pace with fast and ever-changing user needs (needs of the students, researchers, academics and other relevant stakeholders). These academic institutions have libraries commonly known as academic libraries, because they provide information services to the stakeholders of academic institutions. Academic libraries are regarded as the life-blood of academic institutions. This is because academic libraries play a vital role in supporting academic programmes, and helping academic institutions to achieve their strategic objectives. According to Mottaghi-far (2012; 1468), academic libraries are no longer operating in a traditional way, hence they must transform themselves in satisfying the complex and ever-changing needs of modern society.

Academic libraries have a crucial role to play in assisting academic institutions produce world-class graduates, and to improve pass rates of academic institutions. It has to be stated that academic institutions are under constant pressure to meet the needs of the stakeholders. Contributing factors in the academic environment are similar to those affecting organisations in both the public and the private sectors. Academic institutions have a new mandate, which includes holistic development of students and development of applied research. The paradigm shift in higher education landscape which academic libraries are part of, is well articulated by Du Pre (2009:14) as he states that for higher education institutions to succeed, collaboration within and with external stakeholders is paramount.These include customer demands, technological developments, legislation, and global factors. Management gurus are in agreement that knowledge-management is effective in enabling any type of organisation to achieve its strategic objective (Mottaghi-far 2012:1470). Knowledge-management is described by Clegg (2012) as a systematic process of managing both tacit and explicit knowledge, allowing an

organisation to deal effectively with both current and future challenges. Central to knowledge-management philosophy is the achieving of strategic goals and the sustaining of competitiveness. This research projects focuses on the perceptions of library employees on whether knowledge-management philosophy will improve their effectiveness at the Durban University of Technology (DUT).

1.2 Problem statement

The problem is a lack of an overarching philosophy driving library employees at DUT to continuously improve their effectiveness. Responding effectively to the needs of the stakeholders has become crucial. There is need for a philosophy which is embraced and internalized by all library employees. A philosophy inspiring library employees to share know-how is imperative in continuously improving their effectiveness, and working as a collective towards achieving a common goal. The researcher has conducted a knowledge-management course at the School of Business and Leadership of the University of KwaZulu-Natal (UKZN). Through this course, the researcher has realized the importance of a knowledge-management philosophy in organisations. Knowledge-management philosophy has not been implemented by DUT library.

1.3 Background

Academic libraries are operating in a fast-changing academic and information environment in which they must continuously enhance their services (Mavodza and Ngulube 2011:15). In fact, the nature of changes in the academic environment requires new approaches if academic libraries wish to remain relevant, maintaining a competitive advantage. Academic institutions compete for budget allocation from government for top-class students; they all want to become world-class institutions. New demands and technological changes are impacting on academic library services as with any organisation. Academic libraries must respond effectively to such challenges. Knowledge-management is viewed as a critical and strategic tool helping organisations to achieve strategic objectives and to achieve sustainable competitive advantage. Besides the fact that organisational knowledge is a strategic resource, organisational knowledge is also regarded as an irreplaceable capital of organisations.

1.4 Aim and objectives

The study has the following research objectives:

- to determine the perceptions of library employees on whether knowledge-management philosophy will improve library services at DUT;

- to determine the perceptions of DUT library employees on whether knowledge-management will enhance their capacity development;

- to determine whether knowledge-management will facilitate the effective sharing of knowledge across departments in the DUT library; and

- to ascertain whether knowledge-management philosophy has the potential to assist DUT library to achieve its strategic objectives.

1.5 Research questions

Research questions are an important element of a research project; they should be formulated so as to assist in discovering required facts. According to Furseth and Everret, 2013:92), reviewing existing literature plays an important role in helping the researcher to formulate research questions. Knowledge of the field in which the study is based also helps the researcher in formulating research questions. In achieving the above research objectives the following research questions have been formulated:

- Will knowledge-management inspire librarians to share best practices at DUT?

- Will library employees embrace knowledge-management philosophy at DUT?

- Will knowledge-management provide an overarching philosophy driving librarians to improve their practice?

1.6 Research methodology

This was a quantitative type of research project. The nature of a research problem and type of data required helps the researcher to decide on the appropriate methodology. Quantitative research is used in examining the relationship between variables. It produces numerical data which requires a range of statistical analysis techniques (Saunders, Lewis and Thornhill 2012:162). The target population was the library employees at DUT. The library at DUT employs about 80 people. A self-administered

questionnaire was used as a data-collection instrument. Simple random sampling was used in selecting participants for this research project. Statistical analysis software known as SPSS was used in analysing the data.

1.7 Contribution of the study

This research project makes a necessary contribution to knowledge-management theory. The study highlights the perspective of academic libraries in the context of knowledge management theory. The findings and relevant literature provide evidence that knowledge management may be used in improving the effectiveness of the academic library service. The study could also sensitize academic libraries to the fact that knowledge is a strategic tool by means of which to improve productivity and organisational processes. Hence, knowledge management is seen as an organisational tool enabling organisations to adapt to environmental challenges and to gain competencies for success.

1.8 Relevant definitions

The following definitions are relevant to this study:

1.8.1 Best practices: these are the most effective and efficient methods used in achieving organisational objectives (business: ultimate source 2011: 1329).

1.8.2 Competitive advantage: this is a factor giving advantage to an organisation in competitive terms (business: ultimate source 2011:1361).

1.8.3 Creativity is a process of generating new ideas with which to approach problems or existing practices in an innovative way (business ultimate source 2011: 1374).

1.8.4 Communities of practice: are the groups of people within an organisational setting who share a common goal and who interact informally towards a common purpose (Jashapara 2011: 341).

1.8.5 Employee development is the process of giving an employee both formal and informal education, as well as exposure to job experiences, improving capacity. (Noe and Hollenbeck 2007: 564).

1.8.6 Explicit Knowledge is the type of knowledge which may be documented or codified (Haag, Baltzan and Phillips 2008: 574).

1.8.7 Innovation
This is the process of generating and applying new ideas so as to improve products or services within an organisation (Robbins: 2009:538).

1.8.8 Knowledge-management is defined as a process used to manage organisational knowledge (generally known as 'know-how' and 'know-why') for the purposes of meeting the needs of the stakeholders, and remaining competitive (Clegg 2011:664).

1.8.9 Learning organisation is an organisation supporting and promoting learning by encouraging its employees to acquire and continuously share knowledge. (Noe and Hollenbeck 2007: 566).

1.8.10 Organisational learning
Effective creation, use, and sharing of knowledge within an organisation, with the intention of continuously improving processes and practices (Jashapara 2011:343).
1.8.11 Organisational memory

1.8.12 Tacit knowledge: this is the type of knowledge which is already in a person's head (Haag, Baltzan and Philips 2008: 580).

1.8.13 Teamwork: this occurs when a group of committed members within an organisation use their complementary skills so as to achieve a common purpose (Greenberg and Baron 2008:751).

1.9 Significance of the study
This study will highlight the perceptions of library employees on whether knowledge-management philosophy is capable of helping librarians to provide effective services.

It is also important to establish whether librarians will embrace the knowledge-management philosophy in the DUT Library. This study makes a meaningful contribution to knowledge-management theory, there having been very little written about knowledge-management in the context of academic libraries.

1.10 Limitations and delimitations
This study was conducted at DUT library, however, only staff on the Durban Campus libraries participated in the study. Owing to logistical constraints, it would not be possible for the researcher to accommodate DUT libraries outside Durban. DUT has six campuses; two of these are outside Durban. The entire DUT library employs about 80 people.

1.11 Structure of the dissertation (chapters).
This research project comprises five chapters. A brief description of each chapter is given below.

Chapter 1: Introduction: this chapter will provide the research background and research aim and objectives.

Chapter 2: Literature review: this chapter will provide a review of literature relevant to the study.

Chapter 3: Research methodology: this chapter will outline the research methodology to be used in this research project, which includes data collection, data analysis, and target population.

Chapter 4: findings and interpretation of findings: This chapter will present the findings of the study.

Chapter 5: Conclusion and recommendations: This will be the final chapter. It will provide recommendations and will supply the conclusion of the study.

1.12 Summary
This is an introductory chapter which provides a background to the study, the research problem statement, study objectives, motivation of the study, critical questions, limitations of the study, research methodology, definitions of relevant terms, and structure (organisation) of the research project. The next chapter will present a literature review relevant to the study. This chapter serves to point out the direction which this research project is taking.

Chapter 2

2.1. Introduction

This section provides a theoretical background on knowledge-management philosophy. For the purposes of this research project, the focus will be on a few key elements of knowledge-management. These elements of knowledge-management include communities of practice, organisational learning, innovation, and capacity development. According to Oliver (2012:9), literature review has to be presented in a well-structured manner. It should have sub-headings and sub-sections. It is also critical that the researcher's analytical ability be reflected in the literature review section of the research project. The researcher is viewing the knowledge-management philosophy in the context of academic libraries. The literature section will cover knowledge-management in general, also in the context of academic libraries. The literature review will assist in providing a logical link between sections of this research project. The literature review process should assist the research in identifying the latest trends within the field of knowledge-management.

2.2 Knowledge management

Organisational knowledge has to be treated as a strategic tool and a collective resource with which to sustain competitive advantage. The ability to create, share, and manage knowledge within an organisation is vital, given the complexity and rapid changes in the business environment. Central to the knowledge-management philosophy is the effective incorporation of created knowledge into operational processes and daily routines which enhance efficiency. Knowledge-management is in fact a dynamic and multi-disciplined approach, which has become popular because organisations must deal with many challenges, ensuring that the needs of their stakeholders are met. Putting knowledge-management into its proper context, Chen and Liang (2011: 75) explain that the knowledge-management philosophy operates as an adaptive and dynamic change-management tool empowering organisations with the ability to scan their surroundings and thus to formulate operational strategies accordingly. In other words, through the implementation of the knowledge-management philosophy, the organisation is able to cope with business environmental challenges, gaining competitive advantage. Given the nature of environmental challenges faced by organisations in the various sectors of the

economy, knowledge-management is still regarded as the best approach, regardless of the sector in which the organisation operates. The researchers further argue that, based on research and the literature in general, knowledge-management philosophy is becoming popular. It has caught the attention of organisations. Where knowledge-management is implemented, adaptability becomes part of business operations in coping with rapidly changing circumstances. Knowledge-management becomes an enabler and a driving force assisting members of organisations to be productive. The application of knowledge-management makes it possible for organisations to achieve their strategic objectives. A conducive organisational atmosphere has also been identified as key to effective management of knowledge within an organisation. Yan and Wan (2004: 596) concur with many other authors that knowledge-management has the ability to inspire people constantly to create, learn, and share their expertise, in enhancing organisational effectiveness. Knowledge within organisations is regarded as a strategic resource which must be managed effectively, thereby allowing organisations to remain competitive (Maponya, 2009:902). According to Jashapara (2011:342), knowledge-management is an effective learning processes associated with exploration, exploitation, and sharing of tacit as well as explicit human knowledge, thus enhancing intellectual capital and performance of organisations.

Discussing knowledge-management, Jashapara (2011:13) concurs with many authors who are of the view that the strategic purpose of knowledge-management philosophy is to enhance intellectual capital and the performance of an organisation. Damons (2011; 53) describes knowledge-management as a systematic process followed in order to create, share, and effectively utilise both tacit and explicit knowledge within an organisation. From the definitions of knowledge-management, it emerges that employees and their expertise should be treated as strategic resources with which to gain and sustain competitiveness. Knowledge-management practices create a positive atmosphere, in which organisational members may tap into hitherto untapped knowledge so as to achieve strategic outcomes. The literature warns that, in a dynamic business environment, only organisations with the ability to adapt and learn stand a chance of surviving. In a quest for providing excellent services, responding effectively to

stakeholder demands, academic libraries have no option but to consider strategic tactics and philosophies used in the corporate sector. It is against this background that this research project focuses on knowledge-management in the context of academic libraries, particularly the DUT library.

It has become necessary for higher education institutions to adopt business-management approaches that were traditionally meant for corporate organisations. Any changes at an institutional level affect the operations of the library. Embedding knowledge-management philosophy into daily routines and processes of the academic library produces outstanding results. Knowledge-management philosophy seems to be emphasising intangible aspects of the organisations. This is not to suggest that tangible assets are not important, however tangible assets allow intangible assets to be used optimally. In the business sector e-commerce is spoken of. Higher education institutions are transforming their processes; as a result online registration and online teaching are being considered. Given this transitional process in higher education institutions, there seems then to be a need for academic libraries to redesign their processes in line with strategic goals of the parent institution.

The literature accentuates two general knowledge-management schools of thoughts: the first focuses on capturing and storage of organisational knowledge through use of technology. The second school of thought focuses on people as knowledge sources within an organisation (organisational members). Kimble (2013:7) confirms the two schools of thoughts on knowledge-management, which present important facts about knowledge-management. An important point to make is that there are two types of knowledge found in every organisation. These types of organisational knowledge are commonly known as tacit and explicit knowledge. Both tacit and explicit knowledge is explained in the previous and following chapters in this project. Although this research project focuses on all aspects of knowledge-management, the intention is to examine the perceptions of DUT library employees on whether knowledge-management philosophy will improve their effectiveness. This study is therefore centred on and

informed by the knowledge-management school of thought that views organisational members as sources of knowledge.

In the context of academic libraries and knowledge-management, the point is that libraries are also being forced to adapt to rapidly changing conditions. Academic libraries in particular are being subjected to continuous scrutiny and high expectations from relevant stakeholders. It is for this reason that academic libraries are required to implement knowledge-management as part of new organisational processes, thus achieving competitive advantage (Porumbeanu 2010:549).Knowledge-management contributes to and motivates organisational members to share knowledge and learn continuously (Porumbeanu 2010:549). There is evidence that the knowledge-management philosophy is being applied in academic libraries, however, obviously knowledge-management philosophy is used more in the corporate sector than in any other sector. Indeed, knowledge-management has received the attention of organisational leaders. As eloquently stated by Laal (2011:544), knowledge-management has become a popular management tool. Technological developments are not the only challenges faced by academic institutions - there is also the problem of increasing numbers of student registering at these academic institutions. These factors have a direct impact on the services and operations of the academic libraries (Tanloet and Tuamsuk 2011:123).

There is no doubt that knowledge-management has become popular because organisations are continuously searching for effective strategies for remaining competitive. Laal (2011:544) describes knowledge-management as a systematic organisational process which creates, shares and effectively uses organisational knowledge for the purposes of remaining competitive and outsmarting competitors.

For modern organisations both in private and public sector, knowledge-management is viewed as a strategic resource that should be managed effectively so as to improve productivity. Organisations are subjected to constant public scrutiny as customers seek

quality service and quality products. The painful reality for organisations is to choose between two options, namely, adapt or die. In the case of higher institutions of learning, potential students prefer institutions which are capable of producing top-quality graduates. Competitive higher education institutions which are able to produce a high through-put rate are likely to command a larger slice of the budget allocation from both government and private funders. Knowledge-management philosophy may be used to achieve strategic goals within the institutions of higher learning. The ability to adapt to a continuously changing business environment is critical for all types of organisation. The most pertinent factor when implementing knowledge-management is that it creates a conducive environment for organisational members to experiment and generate new ideas.

Technical and infrastructure systems are also important for effective management of knowledge within an organisation. Kim and Ju (2008:282) describe organisational knowledge as a key strategic tool for improving business operations to meet the needs of the stakeholders. Adaptability and responsiveness produce efficiency. The literature states clearly that a competitive requires adaptability and continuous improvement of organisational processes.

The ability to adapt and learn faster than competitors distinguishes any organisation wanting to sustain competitive advantage. Lia, Chang and Wu (2010:3792) emphasise that implementation of knowledge-management philosophy plays a critical role in creating core competencies within an organisation. Being market-driven and learning-oriented sets successful organisations apart from those operating in the traditional way of doing business. Operating in a rapidly changing business environment forces organisations to consider implementing knowledge-management.

A knowledge-management philosophy is used in preparing and designing organisational processes for the future, thus it is the model that fits in perfectly with a progressive business strategy. Jashapara (2011:145) further raises interesting points relating to knowledge-management, one being that knowledge-management helps organisations

to learn and develop dynamic capabilities. This is important because it puts an organisation in a better position to adapt and improve organisational routines. Knowledge-management is a source of team spirit and utilisation of organisational knowledge to advance the strategic agenda of the organisation. Dynamic capability is described as an organisation's ability to continuously improve its processes and to effectively adapt to a rapidly changing business environment.

The knowledge-management philosophy sensitises organisational members to understanding the nature of challenges faced by organisations; also to incorporate organisational knowledge into the strategy formulation. Knowledge-management also stimulates the quest for efficiency. Arndt (2010:1) emphasises the importance of dynamic capabilities. He further states that dynamic capabilities are necessary in dealing with complex challenges in a volatile and unpredictable business environment. From the literature, dynamic capability is a separate concept, however, the knowledge-management philosophy plays a vital role in helping organisations to develop dynamic capabilities. It has been mentioned that knowledge is a strategic resource with which to gain competitive advantage. Knowledge-management practices allow organisations the opportunity of identifying and using valuable knowledge during strategy formulation as well in the decision-making processes.

Creation of knowledge and sharing of knowledge are central to the philosophy of knowledge-management. Knowledge creation is not only achieved by focusing and concentrating on internal processes - valuable knowledge may also be created through interacting with competitors and relevant stakeholders. It has been stated (Lyles 2013: 1) that once knowledge has been created, it should be evaluated and then integrated into existing organisational knowledge so as to add value to organisational processes and business performance. In order to add value, created knowledge has to be fully exploited so as to distinguish the organisation from competitors.

Knowledge-management theory states succinctly that the business environment has become so messy that traditional approaches now fail. Creating relevant core

competencies is an important element of knowledge-management. Research findings also indicate that knowledge-management stimulates a kind of behaviour in favour of a collective learning so as to achieve a common goal. Organisations have valuable knowledge within their systems - organisational memories which remain untapped, because knowledge-management promotes the culture and the positive atmosphere with which to fully exploit organisational knowledge. In the case of higher education institutions, numerous research projects have been conducted, however, these are stored away unopened on library shelves. Lyles (2013:2) encourages organisations to create knowledge, this ultimately leading to improved organisational performance.

The knowledge-creation process assists in developing a systems-thinking culture in which employees view their organisations holistically rather than in a reductionist manner. Implementing a knowledge-management philosophy enhances the problem-solving abilities of an organisation. Effective decision-making is possible when the organisation implements a knowledge-management philosophy. With knowledge-management, the emphasis is not only on improving the effectiveness of organisational processes but also on solving complex challenges, and making strategic decisions. In dealing with complex challenges, knowledge-management provides a collective approach, tapping into collective wisdom which may be applied to both simple and complex problems. Damons (2011: 55) describes challenges faced by modern organisations as multifaceted and therefore, organisations should not rely on the expertise of individuals but on collective wisdom when solving complex challenges.

Technology plays an important role in enhancing the efficiency and effectiveness of organisational services and processes. Equally, when it comes to effective management of organisational knowledge, technology becomes a key factor. There are a number of up-to-date technological tools used in organisations for knowledge-management purposes.

2.3 Knowledge-management in academic libraries.

Academic libraries play an important role in the higher education sector. Environmental challenges affecting higher education institutions have a direct impact on the way in which academic libraries operate. Given that higher education institutions operate in an environment which has become unpredictable, academic libraries are forced to deal and respond effectively to these environmental challenges. Knowledge-management philosophy has been identified as the best option for organisations in the corporate sector. There is a need for academic libraries to adopt a knowledge-management philosophy. The ability to design flexible policies and to learn continuously has become critical. Hence knowledge-management stimulates flexibility and continuous improvement of organisational processes. It has also been noted that the role of academic libraries has changed. Besides having the responsibility of fostering information and literacy skills, and assisting parent institutions to achieve strategic goals, academic librarians are expected to develop knowledge capabilities which create, store, share, and incorporate organisational knowledge into daily operations. Knowledge-management serves as a driver for organisational learning in academic libraries. Operating in a continuously changing environment, it is critical for academic librarians to develop their capabilities so as to remain relevant and effective. In the process of aligning organisational library activities with strategic goals of the parent institution, a knowledge-management philosophy provides valuable knowledge.

In the quest for meeting the needs of the stakeholders, the knowledge-management philosophy is considered effective in promoting informal teams and collaboration across the organisation, thus sustaining a competitive advantage. With positive team spirit, sharing of expertise in the academic libraries becomes easier. The benefits of knowledge-management also include a high level of commitment from organisational members in achieving a common goal. Academic libraries are now involved with teaching, providing online resources: they must play an active role in achieving the strategic goals of the institutions they serve. Given these challenges, knowledge-management could prove the only option. Academic libraries have valuable knowledge and modern technology which could be used to create, capture, and share knowledge

effectively. Academic libraries have the problem of departments operating in silos. Knowledge-management stimulates a systems-thinking culture in which employees commit themselves to working towards a common goal.

Modern organisations, including academic libraries, have excellent staff training and development programmes, however, the challenge is that knowledge gained is not shared effectively across the organisation. In fact, the knowledge-management philosophy encourages a learning-organisation mentality: the ability to adapt and learn continuously in meeting the needs of the stakeholders. Mavodza and Ngulube (2012:1) indicate that knowledge-management is not only about capturing and distributing knowledge - creation of knowledge is part of knowledge-management. Academic libraries are involved in knowledge creation through research, however, there is no overarching philosophy inspiring a positive environment in which employees may create and share knowledge.

Rapid technological developments and challenges heralding ever-changing stakeholder needs, creation, and sharing of new knowledge, have the possibility of improving the effectiveness of academic libraries. Information services remains part of what academic libraries provide, however, as Mavodza and Ngulube (2012:16) correctly point out, the information environment and information needs are changing continuously at a rapid pace. There is growing demand for accessing information sources online; and knowledge could well be used in dealing with these challenges.

Knowledge-management gives organisations the ability of improving their business operations in order to achieve strategic goals. Integrated approaches and collaboration are all-important for the modern organisation. Knowledge-management plays a vital role in promoting such a culture of collaboration within organisations. Academic libraries have no other option but to operate differently in meeting the needs of all the stakeholders. As it has been mentioned, continuous changes in higher education sector have implications for academic libraries. Sewdass and Theron (2004:109) agree with many authors in literature that academic libraries are also operating in an environment characterised by constant changes, influenced by economic, political, and technological

developments, and by political factors. Rapid change and diverse user needs are also some of the challenges faced by academic libraries.

Academic libraries are part of the higher education landscape; therefore services offered by academic libraries must be in line with the needs of the stakeholders. Operational plans of the academic library must consider future direction and trends in the education sector. Knowledge-management philosophy has to feature strongly in the strategic documents of the academic library. More importantly, knowledge-management philosophy gives organisations the ability to adapt to ever-changing conditions of the business environment. Knowledge-management philosophy plays a critical role in the co-creation of collective wisdom assisting the organisation to enhance its effectiveness. Adopting a knowledge-management philosophy has become a strategic option for organisations both in the public and private sectors.

Academic libraries are expected to respond to ever-changing information needs of the users. Formal qualifications of academic librarians are necessary, however, the changing environment forces academic libraries to tap into knowledge stored in organisational memories. The challenge is that library employees are not always enthusiastic in share their expertise. Knowledge-management recommends that this should always be considered during strategy formulation processes. Academic libraries have the necessary infrastructure and the necessary skills to provide quality service. The challenge is the lack of commitment and the unwillingness to share expertise across the library departments.

Discussing technological developments in academic libraries, Schwarzwalder (2011:1) puts it succinctly that, while library budgets are being cut, on the other hand, users' needs must be met. There is a growing demand for quick access to library resources. Users want to access information resources online. Archival materials are also being digitized. These technological trends affect academic library operations and services. The understanding is that digitizing library collection will help to solve space challenges, however, this has also brought some challenges in terms of equipment and employee capacity. The value of library services is a determining factor for budget allocation in

academic libraries. This proves that there is a need for a culture of knowledge-sharing which helps organisations to respond to continuously changing needs of the stakeholders. In dealing with these challenges, knowledge-management is necessary, promoting as it does the sharing of organisational knowledge on strategic goals of the organisation. The environment in which academic libraries operate, is sometimes described as a digital environment. Going the electronic route is necessary, however, it does affect the human resources. Library employees must be trained on how to use the latest technology. These challenges highlight the importance of knowledge-management within the academic libraries.

Even in terms of communicating with library users, academic libraries are now employing social networks. Blogs, Face-book and Twitter are some of the latest technological developments used in communicating with library users. There is also a need for promoting these communication tools so as to make library users aware of their existence. In some instances users must be trained on how to use these communication tools. Very few libraries employees have the necessary expertise to provide such training. In this instance knowledge-management becomes the only option for employees in sharing their 'know-how' and 'know-why'.

Because of their role within academic institutions, academic libraries are referred to as the life-blood or intellectual heart of the campus. This description is an indication that the library plays a critical role in helping the institutions they serve in the achieving of strategic objectives. The ability to adapt to complex challenges is vital for academic libraries. It has been noted that knowledge-management could be used by organisations in designing organisational processes and practices which are responsive to stakeholder needs. Recognising the critical role played by academic libraries, Delserone, Kelly and Kempf (2009:4) recommend that the role of the library should feature in the university's operational strategy. Knowledge-management will help academic libraries cultivate the culture of cross-departmental collaboration in achieving a common purpose. There is continued pressure on traditional universities and UoTs to

increase research through-put rate. This is the area in which academic libraries play a vital role, in providing resources and services supportive of research.

The issue with the digitized collection, is that users expect to get obtain quick results; and this is the aim of digitization. However, there are instances where network problems makes it difficult for users to obtain quick access to digitized collections. These multifarious challenges compel libraries to use different approaches, knowledge-management being the best approach. The responsibility of academic libraries has changed in many respects and at a rapid pace. Analysing the role of academic libraries, Nkosi, Leach and Hoskins (2011:55) note that the nature and the role of academic libraries continue to change. Their responsibility is to provide services which are in line with the strategic goals of the higher education institutions they serve. The focus, in many instances, is to provide necessary support for instructional and research activities; these are core businesses of the higher education institutions. Knowledge-management, sometimes referred to as change-management, has a role to play in assisting academic libraries to adapt and deal with the forces of unpredictable change. There are valid reasons for academic libraries to adopt knowledge-management philosophy.

Recognising the importance of the knowledge-management philosophy as a change-management tool, some higher education institutions are now offering knowledge-management as a module or a subject. This is a clear indication that organisations are acknowledging that business environment has become unpredictable. Organisations have no option but to find effective ways of dealing with challenges as a result of the changing business environment.

Knowledge-management has proved to be effective in conditioning employees' attitudes towards continuous improvement, not only in meeting customer needs, but also in dealing with complex challenges. Knowledge-management is viewed as a key strategic tool which should become part of every organisation's DNA. In a business environment in which organisations change rapidly, authors of knowledge-management theory

explain that only those organisations remaining productive, and having the ability to adapt, will survive.

There is doubt why knowledge-management is critical for academic libraries - the institutions they serve face dynamic and complex challenges. Academic libraries are actively involved in knowledge-creation; they have the technology which can create knowledge. The challenge is that knowledge-creation processes are not designed in a properly integrated manner, in which every person at every level is given the opportunity to contribute, sharing their expertise. Academic libraries have share points and institutional repositories, however, not every employee has a full understanding of the accessing of this knowledge.

Organisational and structural designs of academic libraries tend to stifle creativity and the systematic sharing of organisational knowledge. This is because academic libraries still have departments operating in silos. Hence knowledge-management is effective in creating a positive environment in which knowledge may be shared across the library. The important point about knowledge-management is that it makes it possible for an organisation to interact with stakeholders in accessing valuable knowledge leading to success of the organisation.

The literature reveals that a knowledge-management philosophy has been traditionally associated with and used by management sciences. It was considered irrelevant in other fields such as in academic libraries and institutions of higher learning. Being always under pressure to satisfy continuously changing needs of the library users and other stakeholders, academic libraries are forced to find effective alternatives in pursuing excellence and efficiency. Knowledge-management has received the attention and consideration of academic libraries and other information service organisations.

2.3.1 **Organisational memory in academic libraries.**

Effective utilization of organisational knowledge stored in organisational memories becomes a key strategic factor for academic libraries in making a meaningful contribution, assisting parent institutions to achieve strategic business goals. Organisational memory is a vital element of the knowledge-management philosophy. It serves as an organisational repository which may be used to draw insights on past challenges and success stories. Yang and Wan (2004:595) articulate the advantages of organisational memory, mentioning valuable knowledge for decision-making and future direction for the organisation. Knowledge created in learning process has to be stored for future purposes. The literature provides a proper perspective of organisational memory. This means that organisational knowledge is important for improving productivity and effectiveness of the organisation. Organisational memory encompasses both soft and hard aspects. The soft aspect refers to tacit knowledge, which in stored in peoples' minds, while the hard aspect refers to facilities for storing and retrieving organisational knowledge; for an example in computer-based knowledge repositories. Jashapara (2011:139) warns that failure to have knowledge repositories will result in a loss of valuable knowledge, should experienced employees decide to leave the organisation. In fact, both soft and hard aspects of an organisational memory are vital in sustaining competitive advantage.

Demonstrating the effectiveness of knowledge-management within organisations, Prusak (1997: ix) reveals that innovations and improved services are a result of a collective knowledge which is shared at all the levels of the organisation. Sharing ideas and knowledge enhances productivity and this leads to competitiveness. As with any organisation, academic libraries have repositories which serve as organisational memories. Tapping into knowledge stored in organisational memories provides employees with an opportunity of gaining insight into improving organisational processes. The literature provides evidence that tapping into organisational memories also contributes in reshaping organisational processes. Stored within organisational memory is valuable information which can assist in formulating business strategy of an organisation. Knowledge-management is the kind of organisational philosophy inspiring

employees to fully exploit knowledge from every corner of the organisation; even that stored into organisational memory. There is no doubt that academic libraries could improve services continuously should a knowledge-management philosophy be implemented.

With the rapid and unpredictable change in the business environment, effective management of knowledge provides organisations with best options on dealing challenges. Academic libraries implementing a knowledge-management philosophy will improve services to stakeholders. As with any other change-initiative, employee commitment is the key factor in the successful implementation of knowledge-management within an organisation. Winkler and Mandl (2007:1) stress a very interesting point that, once knowledge has been created and captured, it must be incorporated into organisational processes so as to achieve efficiency. The point is that, in applying organisational knowledge, strategic objectives may be realized. It emerges from the knowledge-management literature that knowledge-management is viewed as a change-management tool assisting organisations to deal effectively with rapid changes in the business environment.

Academic libraries provide the necessary support for parent institutions to achieve desired goals. Academic institutions have both an academic and administration sector. In some institutions the library falls under the administration sector, while in other institutions the library falls under the academic sector. Regardless of the section under which the library falls, the library still plays an important role in assisting the parent institution to achieve desired outcomes. Although the literature points out that organisational memory serves to provide critical information for improving organisational processes, Chang and Cho (2008:15) put it succinctly that new knowledge from external sources is required; organisation cannot rely only on information stored in organisational memory, for continuous improvement and innovation to be achieved. Knowledge from organisational memory, and new knowledge apropos customer needs and market trends sets up an organisation better for enhancing creativity and innovation.

Academic libraries are facing transformational challenges in which technological developments continue to reshape library operations. Friskney (2009:2) illustrates that portable devices are forcing academic libraries to rethink their services. Their library users and academics who are advanced technologically, prefer to access library resources using mobile devices. Challenges relating to technology compel academic libraries to collaborate with other departments in the university, for an example, the Information technology department, ICT, and the IT support department. Knowledge-management has a role to play in academic libraries facilitating collaboration and collective learning. Technology changes rapidly, sharing of expertise is vital in ensuring that technology operates effectively at all times. Introduction of advanced technology ensures the successful management of knowledge within an organisation, academic libraries included. Commenting on the impact of technology in the context of knowledge-management, Xu, Houssin and Caillaud (2011:423) indicate that new technology is indeed as an enabler for effective management of organisational knowledge. Nothing stops library users from using Google in seeking information, proving that libraries are no longer the only places in which information may be found. Failure to adapt to these technological challenges will have negative consequences for academic libraries; academics and students using mobile devices to access information. The fact is that students and academics can provide valuable knowledge which can augment the efficiency and adaptability of the library.

Knowledge-management practices should encompass the retention of organisational members who have valuable knowledge and expertise. Part of the knowledge-management strategy is to ensure that employees whose tacit knowledge adds value in improving productivity should be incentivised not to join the competitors. Considering the high rate of employee mobility (employee turnover), Dube and Ngulube (2013: 2) articulate that competitors also use their own strategies for attracting employees with experience and valuable tacit knowledge. Being successful in retaining skilled workforce helps the organisation to maintain its organisational memory and to develop workforce competence. Analysing the trends and competency levels of academic institutions from the South African perspective, Dube and Ngulube (2013:2) reveal that there is a lot that

must be done. As academic institutions continue to face challenges from different directions, this has a direct impact on library services. On the issue relating to loss of valuable tacit knowledge, apart from losing retirees, this is the way in which an organisation loses expertise and experienced employees. The other factors include mergers, downsizing, and retrenchments. Through the processes of retaining valuable organisational knowledge, junior organisations have the opportunity of being developed and becoming skilled. With the implementation of a knowledge-management philosophy, a system of employee networking and developing of their capabilities across the organisation is created. Worth mentioning is that the knowledge-management philosophy serves as a strong bond, keeping employees connected, and reinforcing the spirit of pursuing excellence within an organisation. In that context, knowledge-management practices will also serve as a catalyst for transformation in South African institutions of higher learning.

As part of improving and meeting the needs of the stakeholders, academic libraries conduct surveys and receive valuable feedback helping in reshaping and improving services offered by the academic libraries. Knowledge-management practices provide the mechanism for incorporating user-feedback in improving the effectiveness of library services. Because of the critical role they play, academic libraries are described as the life-blood of the university. Besides having to deal with transformational challenges, higher education institutions are expected to produce graduates with relevant skills. In view of this, academic libraries contribute not only by providing information resources but also in terms of holistic development of students. Poll in (Dube 2011:28) contends that academic libraries must present a strong case in improving their strategic worth in the university setting. Knowledge-management has a role to play, especially for academic libraries, users having the option of finding information freely on the Internet. This indicates that academic libraries are competing with other information-providing agencies. Dube (2011:28) raises a very important point that in fact the role of academic libraries is no longer self-evident. Academic libraries have present a compelling case to prove their worth in the universities which they serve. Points raised by a number authors

indicate that academic libraries must have the ability to adapt and respond to dynamic and rapid changes within the higher education environment.

Mottghi-Far (2012:1468) reiterates that academic libraries face what he calls an e-revolution. This comes from the notion that libraries are operating in an environment that is becoming digital at a very fast pace. The e-revolution is part of a complex, dynamic environment which compels academic libraries to redesign their processes and services. The painful reality is that complying and transforming academic libraries has cost implications. Mottaghi-Far (2012:1469) further states that in the midst of such challenges of e-revolution and other factors, knowledge-management remains crucial for academic libraries in providing excellent services to the stakeholders. Because of the e-revolution, even libraries users expect to access library resources without necessarily being in the library. With this challenge in mind, knowledge-management practices can inform the strategic objectives of the library and of the institutions they serve.

The concept of knowledge-management is similar to a learning-organisation philosophy. Both these concepts are relevant to all types of organisations. Knowledge-management harnesses the spirit of knowledge creation, capturing and sharing across the organisation. Where knowledge-management philosophy is implemented, members of the organisation are encouraged to look internally for knowledge which may be used for decision-making and in finding solutions. This suggestion makes a lot of sense, organisations having valuable knowledge at their disposal. The problem is that organisational knowledge is not managed and distributed effectively across the organisation. The same argument applies to academic libraries having expertise and valuable knowledge within, however, there is no collective effort to ensure that knowledge sharing becomes the DNA of everyday operations.

Jain and Mutula (2008:10) recognise that academic libraries have the necessary technology and expertise, however, the problem is a lack of a strong knowledge sharing culture inspiring employees fully to exploit organisational knowledge. The

researchers also mention that academic libraries employ experienced employees; unfortunately, however, organisational systems are not designed to ensure that junior staff members gain knowledge from senior employees. Jain (2007:377) makes a very interesting observation that library and information practitioners are also known as knowledge managers. Despite this, knowledge in academic libraries is not fully exploited in an effort to achieve library goals and the goals of their institutions. Because of their role in the higher education institutions, there is a strong perception that academic libraries are producing knowledge as one of their core functions.

Hufford (2013:288) views the role of the academic library in terms of promoting the culture of learning. In recent years, a great deal has changed and academic libraries do play an active role in promoting the culture of reading and learning. This has become a difficult task considering technological developments, especially mobile devices, are becoming popular with students at the universities, however, there are still older initiatives such as book clubs, which are intended to promote the culture of reading and learning. Academic libraries are expected to reinforce learning beyond lecture rooms where students use library resources in the activity commonly known as self-directed learning. This means that academic librarians should have the necessary capacity for assisting students with learning that takes place beyond the lecture rooms. Therefore, this puts forward a strong case for the implementation of a knowledge-management philosophy within the academic libraries. It is has been acknowledged that by providing information-literacy courses, the academic library adds value to students' learning experience at the university. Through knowledge-management practices, academic librarians can share best practices, in order to make a substantial contribution towards promoting the culture of reading and learning within the university.

Gaffoor and Cloete (2010:1) make a very interesting comment that knowledge-management as a philosophy enhances organisational processes in achieving organisational efficiency. They further stress that commitment from all organisational members is crucial. Many authors assert that employee dedication serves as a strong foundation. Besides employee commitment and dedication, management of the

organisation must play a leading role in harnessing a team spirit and an attitude of forward thinking. There is documented evidence that most organisations have managed successfully to implement knowledge-management   .To enable and ensuring smooth implementation of knowledge-management in an organisation, Gaffoor and Cloete (2010:1) demonstrate that organisation's strategy, organisational structure, and information technology are all important.

2.3.2 Perceptions of academic librarians on knowledge-management.
Active involvement of organisational members is the key factor for the successful implementation of a knowledge-management philosophy. Yang (2008:345) says that the human element is important in that organisational knowledge is created by employees. Sharing of knowledge across the organisation also depends mostly on the human element in an organisation. This section on the perceptions of employees towards knowledge-management practices is very important, forming part of the research objectives of this study. In this section, employee perceptions of knowledge-management in academic libraries, both generally and specifically are captured.

From the literature and research project conducted by Yang (2008:345), organisational employees view knowledge-management as a motivating factor in improving organisational performance. Another important point is that organisational members are of the opinion that knowledge-management makes it possible and easier to find knowledge at the point of need. From the employees' perspective, knowledge-management philosophy plays a vital role in terms of capacity development, in the form of knowledge sharing. Worth mentioning also is that employees have a sense that management at all levels has to foster a positive atmosphere for knowledge-management philosophy. Operating in an environment that has been described as unpredictable, knowledge-management becomes the strategic choice for organisations in the public and private sectors. Yang (2008:345) explains that, from an employee perspective there is a strong view that top management in an organisation has to provide necessary support and resources for successful implementation of a knowledge-management philosophy. From the literature it appears that generally,

employees show a positive attitude towards the implementation of knowledge-management philosophy within an organisation.

As expected, in an organisation in which people work in silos there is very little understanding of the way in which an organisation could achieve strategic goals through knowledge-management practices. This is generally the case in academic libraries, where librarians have no full understanding of the various knowledge-management elements and benefits. The general understanding is that, as part of pursuing excellent and in improving services, academic libraries are now using the latest technologies. Library users have changed their ways of accessing and searching information; hence academic libraries must respond to rapidly changing information-searching and usage trends. Discussing knowledge-management in academic libraries, Nazim and Mukherjee (2013;1) emphasise that, in fact, knowledge-management was used in the corporate sector. They further explain that because of continuous changes in the higher education sector, academic libraries have been adopting knowledge-management philosophy. Based on the findings of their study, Nazim and Mukherjee (2012: 1) note that academic librarians have demonstrated commitment and a positive attitude towards the implementation of a knowledge-management philosophy. Worth noting also is that academic librarians strongly believe that knowledge-management can be used in achieving business goals for the parent institution. There is a strong sense that knowledge-management practices can be used to deal effectively with the diverse information needs of the academic institutions.

Understanding the challenging environment of the higher education sector, academic librarians demonstrate the willingness to continuously improve their effectiveness. It is also evident that in academic libraries, collective learning is viewed as a best approach for enhancing organisational performance. For successful implementation of knowledge-management philosophy, employee attitude and commitment are critical. Dymock (2006:531) concludes that, with knowledge-management, employees show that they all have the opportunity of developing their skills and expertise.

It has been realised by members of organisations that traditional approaches and practices are not effective for the rapidly changing business environment. The general sense is that organisational members acknowledge the value of learning as individuals as well as a collective in sustaining the competitiveness of their organisations. The general feeling is that employees have the firm view that a knowledge-management philosophy provides wonderful opportunities for continuous learning within an organisation.

Kim and Ju (2008:282) share their research findings which indicated that knowledge-management is essentially viewed as a strategic tool for outperforming the competitors. Indications from the literature are that employees from different sectors within an organisation are positive that knowledge-management is an effective approach for dealing with complex challenges and achieving strategic objectives of the organisation. They further state that their research findings reveal that there also a concern in higher education institutions amongst employees, particularly academics who focus on succeeding as individuals, instead of working towards a common purpose within the institution.

Analysing academic librarians' perception of the knowledge-management philosophy, Nazim and Mukherjee (2013:1) demonstrate that there are instances in which knowledge-management practices are viewed as processes focusing on using technology for managing information within an organisation. This illustrates that people miss the point of tapping into both tacit and explicit knowledge in improving organisational processes and efficiency. It is also evident that confusion exists among academic librarians in terms of differentiating between information-management and knowledge-management. Because of advanced technological tools found in academic libraries, this places the libraries in a better place for creating, managing, and sharing knowledge effectively. Technology makes it possible for academic librarians to share knowledge effectively, even remotely, without having to be present on campus.

The undeniable reality is that transformational, technological, and other challenges in the higher education sector, require new, effective approaches. Based on the understanding of such complex challenges, Sha and Mahood (2013:619) demonstrate that academic librarians view knowledge-management as an effective management philosophy with which to achieve organisational effectiveness of academic libraries.

In a fast-changing and unpredictable higher education environment, institutions of higher learning are working hard to improve their effectiveness and research capacity. Discussing challenges of the higher education environment, Adhikari (2010: 95) mentions that institutions of higher learning have been operating in a stable environment with neither competition nor complex challenges. This has changed now that institutions of higher learning are operating in a much more dynamic, complex, and volatile environment. It has become common knowledge that academic libraries play a critical role in supporting and being actively involved in pursuing excellence in higher education institutions. On this basis, changes made at an institutional level affect library processes. Highlighting this paradigm shift, Bhusry (2011:314) states that, in response to rapid changes in higher education, teaching approaches must change.

Knowledge-management could be utilised for the designing of new curricula and the formulation of effective teaching strategies. Research is one of the core functions of the higher education institutions. Therefore research is a form of knowledge creation. Knowledge production has become a critical function of the institutions of higher learning in meeting the needs of a knowledge-based society. Laal (2011:546) reiterates that knowledge creation through research has to be managed effectively for future use. In higher education institutions, knowledge-management is central for adapting to rapidly changing stakeholder needs. In terms of employee perceptions on the application of knowledge-management, many authors make positive comments. Knowledge-management is perceived by academic librarians and the academic community at large as the best approach for dealing with ever-changing challenges, and in effectively achieving business objectives.

Further to the general point that has been mentioned by a number of authors, Liao, Chang and Wu (2010:3792) conclude that in a dynamic business environment, only those organisations having the ability to learn continuously will be able to survive. A knowledge-management philosophy therefore serves as a catalyst to a systematic, effective way of managing organisational knowledge. Effective collaboration between various departments may be achieved through the adoption and implementation of knowledge-management practices within an organisation.

2.3.3 **Barriers to effective implementation of knowledge-management philosophy in academic libraries.**

It emerges from the literature that the role of the academic library is to support the parent institution in terms of teaching, learning, and research. Part of academic library's role is to put systems in place promoting self–directed learning which happens beyond the classroom. Academic librarians understand full well that their roles must change as the higher education environment changes. Based on their research findings, Nazim and Mukherjee (2013:1) outline some of the barriers to effective implementation of the knowledge-management philosophy in an academic library. Lack of commitment from the top management is viewed as one of the challenges leading to ineffectiveness of the knowledge-management philosophy. Knowledge-management practices can easily be incorporated into daily operations of the library, however, in most instances, lack of technological infrastructure becomes a challenge.

Organisational knowledge created through knowledge-management processes has be nurtured and incorporated into daily operations of the organisation. For knowledge-management to be effective in academic libraries, there has to be a conducive environment in which employees are willing to co-create and share knowledge across the organisation. Explaining factors that negatively affect the successful implementation of knowledge-management within organisations, Bessick and Naicker (2013:1) point out that if individuals with valuable knowledge exit the organisation, it loses valuable knowledge. What they are saying is that when employees work as individuals rather than as a collective, the organisation cannot make really effective use of this

knowledge. This becomes a barrier to effective knowledge-management, if there is no willingness from organisational members to share knowledge. Job satisfaction also plays a major part of successful implementation of knowledge-management. Obviously, where there is unhappiness, organisational members will not share their knowledge.

In deeply organisational cultures, in which individual departments operate in silos, effective management of organisational knowledge is negatively affected. At the heart of the knowledge-management philosophy, the central issue is not to remove the existing organisational structure or organogram, however, the main issue is with an overarching philosophy encouraging co-creation and better sharing of knowledge across departments of the organisation. Knowledge-management speaks to behavioural issues and operational routines that must change in order to fully exploit organisational knowledge in enhancing performance.

In benefiting from the application of knowledge-management, retaining good capacity is necessary. This is because knowledge-management emphasises effective utilisation of employee competencies. On the issues relating to factors which negatively affect management of organisational knowledge, Dube and Ngulube (2013:3) explain that universities have a challenge in retaining employees with top expertise. Some of the reasons include a high level of job-hopping. With high levels of job-hopping organisations are unable to sustain their competitiveness. The point is that knowledge-management practices are indeed negatively affected by job-hopping.

2.4 Communities of Practice

Communities of practice play a critical role in ensuring the effectiveness of knowledge-management within organisations. Canary and Mc Phee (2011:35) explain the concept of communities of practice as groups of people who share a concern, a set of problems, or who are passionate about their practice to the extent that they share their expertise and knowledge on a continuous basis. Through communities of practice, an organisation is able to create a culture of collective learning. It has been mentioned in knowledge-management literature that sharing of knowledge and expertise creates a

positive atmosphere which helps organisations in achieving their strategic objectives. The interesting point about communities of practice is that they could be formed by a group of people from different units, with a divergent set of skills making it possible to deal with complex problem situations within the organisation. With communities of practice, even complex challenges are easily dealt with, because members have the opportunity of brainstorming and applying what is affectionately called 'the wisdom of the crowd'. In continuously improving the effectiveness of the organisation, communities of practice must mobilise valuable knowledge in order to achieve continuous innovation. In an academic library environment, placing people with different expertise into different departments will help in adapting and responding to the needs of the academic community.

Discussing the concept of communities of practice Canary and McPhee (2011:35) further emphasise that this has become a popular model within knowledge-management for organisations to effectively use and manage their organisational knowledge. Communities of practice encourage their members to learn from one another, share best practices in applying collective wisdom for solving organisational problems. Because communities of practice are formed informally so as to pursue the shared common interests of the group members, it becomes self-organising and self-managed (Chetty and Mearns, 2012:4). It is widely stressed in the literature that communities of practice add value to organisational performance. Chetty and Mearns (2012:1) further stressed that communities of practice are strategic tools for knowledge-management. Because organisations are operating in an environment in which organisational knowledge has to be used in achieving competitiveness, it is also important to note that there are three knowledge-management schools of thought. The first school of thought focuses on technology as a tool for managing knowledge within an organisation. The second school of thought deals with people as sources of knowledge. The third school of thought captures both technological and human aspects of knowledge.

The complexity of challenges faced by modern organisations requires new approaches which inspire organisational members to be innovative, to learn continuously and to adopt collaboration within and outside the organisation. It is very encouraging to note from the literature that knowledge-management is relevant and effective for all types of organisation whether private, public or non-governmental entities. From the literature, it is has been established that using traditional approaches is no longer effective in helping modern organisations to deal with complex challenges. Remaining competitive is critical for any organisation. As has been stated, communities of practice are strategic tools for knowledge-management. Communities of practice are also known as "knowledge communities". According to Wenger (2003:2), communities of practices are known as learning networks. Knowledge-management stimulates learning, in which organisational members learn and share knowledge. In fact, communities of practice also operate as social learning systems. Learning has become important for organisations to outsmart and outperform competitors.

Wenger (2003: 76) provides a deeper understanding of communities of practice, in further describing these entities as learning networking driven by mutual engagement, and mutual accountability. These are the factors connecting and inspiring participants within the communities of practice to be more productive. The general view from the literature is that communities of practice may also be regarded as a forum stimulating learning, and a forum on which members of the organisation share ideas for the benefit of the organisation.

Given the necessity for organisations to develop and share employee expertise, many organisation still find it difficult to create a conducive environment for knowledge-sharing across organisations. Communities of practice are regarded as a useful model for effective development and sharing of knowledge within organisations. Borzillo (2009:1) is of the view that, as much as communities of practice are self-organising by nature, there is a growing need for managers to support communities of practice in achieving strategic advantage. The important point about communities of practice is that they stimulate a culture of collective learning for a common purpose within organisations.

Discussing the way in which communities of practice operate, Borzillo (2009:3) indicates that communities of practice are also known as intra-organisational networks. Communities of practice serve as informal structures promoting continuous collaboration and effective sharing of knowledge within an organisation. The good thing about the communities of practice model is that it serves to bind members of the organisation together. It also maintains the momentum of working towards a common goal. Communities of practice prepare the ground for collective learning and transfer of knowledge across the organisation.

Considering the complex challenges faced by modern organisations, including institutions of higher learning, Bazalek (2010:1024) explains that knowledge-management in the form of inter-institutional and inter-disciplinary collaboration has assisted organisations in dealing with certain challenges. In a South African context institutions of higher learning are still expected to ensure that higher education is inclusive. Dealing with such challenges, communities of practice could play a role in having structures in place even at managerial level, which interact in finding solutions to common problems faced by institutions of higher learning. This makes the role of communities of practice even more relevant, because they may not be restricted to a particular organisation.

Even with academic libraries there are national and international forums where knowledge-sharing takes place in the form of conferences and seminars. The challenge is the implementation of a knowledge-management programme. Academic libraries and higher education institutions are still designed in such a manner that each department operates in isolation. Highlighting the benefits of communities of practice within academic libraries, Attenbury and Henrich (2010:161) indicate that this model, which is part knowledge-management, facilitates collaboration between different departments of the library. Communities of practice serve as a catalyst for innovation and generation of collective ideas within an academic library. Attenbury and Henrich (2013:161) further explain that communities of practice present a platform for capacity development in

which senior organisational members mentor and empower junior, inexperienced employees.

Shared ownership is of utmost importance in achieving organisational success; through communities of practice, there are opportunities which cultivate the shared ownership mentality. In the process of interaction, in the form of communities of practice, organisational members develop an understanding of common goal and they contribute meaningfully towards a common goal. Through communities of practice, positive behaviour and energy is created so as to sustain a continuous generation of collective ideas.

2.5 Organisational learning

Organisational learning is the process through which organisational members continuously improve their organisational effectiveness (Jones and George 2011: 232). Core competencies are important for organisation in adapting and achieving of strategic goals. It has been noted that knowledge-management stimulates organisational learning. Knowledge-management is about effective use and management of organisational knowledge, ultimately leading to capacity development and efficiency in an organisation. In other words, knowledge-management facilitates learning in an organisation: this is known as organisational learning. Jashapara (2011:343) defines organisational learning as the process of improving organisational practices and processes through better knowledge and understanding. Through organisational learning, organisations are able to remain competitive. Organisational learning encourages employees to learn from their past experience in improving products and services of the organisation. In a rapidly changing environment, decision-making has become difficult for organisations, however tapping into organisational knowledge makes the decision-making process easier.

Organisational learning is crucial for any organisation because of many factors that require organisations to continuously improve their products and services. Jantz (2013:3) stresses that modern organisations, including higher education institutions are

operating in an environment characterised by rapid change. In responding effectively to such challenges, the literature, particularly Jantz (2013;3) warns that being innovative is no longer an option for organisations, but a necessity; the environment in which organisations operate comprising rapid transformation. Remaining relevant and meeting the needs of stakeholders is important for modern organisations. Organisational learning therefore serves to help organisations adapt effectively to the ever-changing business environment. Organisational learning gives organisations the ability to learn (continuously) new and effective ways of improving business operations. Expressing their views on the importance of organisational learning, Ofluoglu and Somunoglu (2012:188) point out that learning is indeed fundamental for modern organisations.

Considering the many challenges faced by modern organisations, including academic institutions and academic libraries, knowledge from individual organisational members must be transformed into organisational knowledge and be used in achieving the strategic objectives of the organisation. In fact, knowledge-management transforms and improves organisational processes and practices. Organisational learning is about institutionalized learning which has to happen at all levels of the organisation. Academic libraries, as with any type of organisation, will benefit from knowledge-management in that it facilitates capacity building of employees, therefore improving the effectiveness of the organisation.

An organisational environment which is supportive of learning is critical. Members of the organisation (employees) should be encouraged to try new ideas and learn from their mistakes. The leadership in organisations must promote and reinforce continuous learning at all levels of the organisation. In effectively dealing with complex challenges, organisational learning should replace traditional approaches that have become obsolete.

It is therefore imperative for organisations to understand that, in achieving organisational learning, employees at all levels must learn from mistakes. They should also be encouraged to try new ideas and experiment while performing their duties.

2.6 Continuous learning in a workplace

Unprecedented and rapid change in a business environment places organisations in a difficult situation. Continuous learning is a key element of the knowledge-management philosophy. Kyndt, Dochy and Nijs (2009:369) stress the importance of continuous learning within organisations, as this enhances the organisational processes and also leads to the success of organisations. Knowledge-management lays a strong foundation for continuous learning within an organisation. Keeping up with the latest trends in the business environment is critical, hence knowledge-management motivates organisational members to engage in continuous learning. Core competencies of the workforce are continuously enhanced through continuous learning. Kyndt, Dochy and Nijs (2009: 369) are of the view that learning driven by knowledge-management is cheaper and effective because it happens on the job, with a strong emphasis on application of acquired knowledge. For academic libraries continuous learning can be of great benefit in improving services. In competing effectively in a global market place, the ability of an organisation to learn is paramount.

Given the challenges faced by different organisations in a turbulent environment, knowledge-management facilitates the positive spirit and the willingness to continuously improve employees capabilities, enhancing productivity. According to Jorgensen, Laugen and Boer (2007:363) continuous improvement is an organisation-wide systematic incremental process implemented to improve the productivity of an organisation. The success of knowledge-management practices rests on continuous learning and continuous improvement being key elements of knowledge-management. Knowledge-management differs from other management models in that a sense of community and a sense of belonging is encouraged across the organisation. Newell and Robertson (2002:107) state that trust and collaboration are essential ingredients for the successful adoption and implementation of the knowledge-management philosophy.

It emerges from knowledge-management literature that, because of quality monitoring systems in higher education institutions, this service rendered by academic libraries must continuously be improved so as to meet certain standards. Discussing quality

assurance practices within academic libraries, particularly in South Africa, Dube (2011:26) asserts that quality assurance practices are important in evaluating services, ensuring that services are continuously improved. Knowledge-management philosophy instils the culture of continuous improvement of organisational processes thus satisfying the needs of the stakeholders.

In dealing with complex challenges which come at an accelerated rate, continuous improvement as a result of knowledge-management practices equips organisations with a forward-thinking mentality. Relying on how things were done before, places an organisation in a dangerous position. Knowledge-management generates the inquisitive culture, in which organisational members keep challenging the status quo, finding best approaches to problems and challenges. Through a continuous improvement process, employees gain an opportunity of sharing best practices and generate new ideas in improving productivity of an organisation. Without any doubt continuous improvement is critical for academic libraries, as with any other organisation. If the needs of the stakeholders keep changing, continuous improvement becomes necessary; and knowledge-management is effective in stimulating continuous improvement a mind-set of an organisation. As has been articulated by many authors, a knowledge-management philosophy is about creation, storage, and also sharing of valuable knowledge in an organisation. Given the complexity of challenges, organisations do benefit from continuous improvement in that it inspires innovation, creativity, and application of innovative ideas thereby achieving competitiveness.

2.7 Innovation

Innovation is simply defined as a new idea applied in improving a product, organisational processes, or service (Dalkir 2011:467). He further explains that innovation will involve change, however, he also argues that not all change initiatives will necessarily involve new ideas. Looking at innovation in a broader sense Dalkir 2011:467) states that the concept of innovation helps organisations to convert knowledge and ideas into new benefits. Innovation is about questioning the status quo (existing processes, practices and systems); therefore leaders of organisations are expected to encourage employees to become innovative (Pellisier 2012:5).

Innovation is critical in academic libraries as it is in other types of organisation. Analysing innovation in the context of academic libraries, Jantz (2012: 3) notes that the impact of innovation cannot be measured easily. This is because academic libraries are not profit-making organisations. A knowledge-management philosophy inspires academic librarians to be innovative in order to improve effectiveness of their services.

In essence, innovation is about the generation of ideas that, when implemented, will offer improved services by organisations. Satisfying the needs of customers, those of stakeholders, and being able to achieve strategic objectives, require continuous improvement of mindset and innovation. As mentioned by Parker (2006:23) innovation has become part of organisational culture, and a driving force in improving organisational processes and services. Innovation is not only about grand ideas; it is also about the accumulation of insight used continuously so as to achieve excellence. Viewing innovation in the context of academic libraries, Doan and Kennedy (2009: 348) accentuate the point that academic libraries should innovate, not only so as to keep pace with technological and global trends but also in meeting the needs of the users. In fact, academic libraries have realised the importance of innovation and the need to adapt.

Academic libraries are regarded as the life-blood of academic institutions. Their role has changed to that of partnerships with academic departments, providing information literacy and supporting teaching and learning. Doan and Kennedy (2009:349) state that academic libraries are now expected to design operational systems which stimulate discovery (research, student engagement, and academic excellence. As academic institutions are faced with many challenges, academic libraries should play a meaningful role in assisting academic institutions to achieve their strategic objectives and to remain competitive. Being innovative is critical for academic libraries as one of their key roles is knowledge creation.

The business operations of academic libraries are directly affected by technological advances; for example, academic libraries are digitizing parts of their resource

collection so as to facilitate remote access. As has been stated before, innovation is critical for academic libraries (Jantz, 2012:4).

It is interesting to note that, from the literature, authors emphasise that remaining competitive is not about being the largest or having the most resources. What is critical is the ability of an organisation to develop (continuously) new and effective processes by means of which to do business (Foss et al., 2012:216). Innovation helps organisations in designing processes and procedures which are relevant to the needs of stakeholders. Higher education institutions, which academic libraries are part of must be innovative in attracting sponsors, gaining more funding from the government and in producing top graduates. Innovation also helps organisations to adapt and deal effectively with complex challenges in an environment that has been described as unpredictable for all the business sectors.

According to Bhengu (2009:41) there are a host of imperatives compelling both private and public organisations to be innovative. He further states that failure to innovate will lead to serious consequences for organisations. Learning and innovation in organisations should be greater than the rate of change brought about by environmental factors. This analogy is based on ecology: survival of an organism depends on its learning ability, which must always be greater that of the accompanying change.
Environmental challenges place organisations under a great deal of pressure to generate new ideas and knowledge so as to improve products and services. Knowledge created through knowledge-management processes is used to innovate and enhance organisational processes, thereby gaining competitive advantage. Knowledge-management philosophy generates an atmosphere in which employees add value to the operations of the organisation (Lyles 2013: 4).

Creation of new knowledge and being innovative is necessary for organisations in adapting to complex challenges as a result of rapid changes in the business environment. In becoming innovative, Wildervanck (2007:18) suggests that organisations must create discussions forums at which employees will be able to

engage with one another, generating innovative ideas. The reality is that organisations, including academic libraries, have excellent ideas scattered all over the organisation. Knowledge-management encourages collaboration, teamwork and effective use of organisational knowledge. Academic libraries have a diverse workforce with diverse sets of skills. Knowledge-management philosophy facilitates the process of brainstorming and the working as a collective. Sha and Mahmood (2013:623) conclude that the implementation of a knowledge-management philosophy is a worthwhile option for academic libraries, as well as other information service agencies.

2.8 Summary

Literature relevant to the study was critically analysed, evaluated, and interpreted with the objectives of the study in mind. In the process of reviewing the literature relevant to the study, the researcher was able to identify trends, contradictions, latest developments, similarities, and gaps, in relation to the knowledge-management philosophy in general, and also with a special focus on the academic library context. It is interesting to note from this chapter that the knowledge-management philosophy plays a critical role in stimulating the culture of sharing best practices, sharing of expertise, and also in helping organisations to remain competitive. Presented in the next chapters is the outline of the research methodology used in the study.

CHAPTER 3: METHODOLOGY

3.1 Introduction

The previous chapter presented the literature review. This chapter outlines the nature of this research project, which covers population, sampling method, the way in which the data was collected, analysed, and interpreted. This research project was of a quantitative type, which means that responses from participants could be counted. This research project was conducted to establish whether the application of a knowledge-management philosophy will improve librarians' effectiveness at DUT.

3.2 Research design

Research design serves a blueprint outlining the data-collection approach, measurement, and analysis of data, in line with the research questions and objectives of the study Sekaran (2013:95). The research design aspects of this study are explained in the following sections. As mentioned before, the study was quantitative in nature. Jupp (2006:250) describes quantitative research as the type of research which produces data in a numerical form for quantitative analysis. The literature review played a critical role in the formulation of pertinent questions for this study. Furseth and Everett (2013:111) explain that research design has to be relevant to the research being conducted.

3.3 Data collection

A questionnaire was used for collecting data from the library employees at DUT. According to (Saunders, Lewis and Thornhill 2012:679), a questionnaire is a data-collection instrument which has a set of questions to be answered by the participants in a predetermined order. The researcher is happy with the 62% response rate. The willingness to participate in the study by the participants was encouraging. There were no challenges encountered during the process of data collection. Questionnaires are in fact recommended for the research project, in which large numbers of quantitative data is collected (Sekaran 2013:147).

3.3.1 Research instrument

A self-administered questionnaire was used for collecting data from the participants. Sekaran (2013:147) states that a personally administered questionnaire is a good way of collecting data, particularly when research is conducted in a confined, local area. The researcher adopted Likert-scale type of questions, i.e. the questionnaire sought responses based on the strongly agree, agree, disagree, approach. A self-administered questionnaire was chosen for many reasons. Using a self-administered questionnaire allows the researcher the opportunity of encouraging participants to fill in the questionnaire, and to clarify issues participants might have with regard to the research project.

3.3.2 Population

The targeted population for this study was the library employees at the DUT. Bless (2006: 184) defines population as a complete set of events, people, or things to which the research finding are to be applied. Library employees from various sections of the library, at different levels, participated in this research project. A total of 70 librarians participated in the study. The researcher is employed in the DUT library; and the participants demonstrated a high level of commitment and willingness to participate in the study.

3.3.3 Sampling

Sampling is defined as a technique used in research in selecting a small group from the population. Jupp (2006:271) further explains that it is not always possible to include the entire population in taking part in the research project. Simple random sampling was used to select a sample from a population of library employees at DUT. A sample of 70 librarians was selected for this study. During the sampling process, the researcher aimed at ensuring that the sample was a perfect representative of the entire population.

3.3.4 Pre-testing the questionnaire

Pre-testing of a data-collection instrument was achieved before the questionnaire was administered to the participants. A total of 10 librarians participated in the pre-testing of the research instrument.The purpose of pretesting a questionnaire was to test its

effectiveness for collecting data so as to achieve research objectives. Fox and Bayat (2007:102) explains that pretesting is important to check for any misunderstanding and confusion and also to ensure reliability of the research instrument.

3.3.5 Administration of a questionnaire

The questionnaire was administered immediately after the pretesting of the questionnaire. The questionnaire offered clear instructions which made it easy for participants to complete the questionnaire. Double-barrelled questions and ambiguous statements were not part of the questionnaire. This resulted in a smooth process of administering the questionnaire. Graziono and Raulin (2013: 319) stress that the language used in a questionnaire must always be at the level of the respondents. Confidentiality of the participants was ensured; and data obtained was used for research purposes.

3.4 Validity and Reliability

Validity and reliability are critical factors for a research project. Wagner, Kawulich and Garner (2012:80) stress the point research instrument must be reliable and valid. Saunders, Lewis and Thornhill (2012:684) define validity as the extent to which the research instrument accurately measures what it intends to measure. The research instrument proved its validity when the pre-testing was conducted. Reliability is the degree to which the research instrument produces the same results when used repeatedly on the same object (Babbie 2013:188). For this study, pre-testing was conducted and it proved the research instrument to be reliable. Participants understood the questions in the questions and they had no problems in completing the questionnaire.

3.5 Data analysis

Data analysis is the processing and analysing of data using appropriate statistical approach for obtaining a meaningful interpretation (Graziono and Raulin 2013: l43). Data collected from the participants was analysed using a SPSS package (version 200). During the data-analysis process responses from participants were grouped into

categories following the structure of the questionnaire. The decision to choose Microsoft Excel was informed by the size of the sample, and also by the fact that Microsoft Excel will help to generate graphs, tables, and charts. These help with the presentation of the findings in the most meaningful manner.

3.6 Ethical considerations.

Necessary processes were followed in obtaining ethical clearance and the permission to conduct this study in the DUT library. Ethical clearance certificate (number HSS/0526/013PGD) was obtained from the Humanities & Social Sciences Research Committee before the research was conducted. The consent letter which accompanied a questionnaire explained the purpose of the study. It also assured participants that their responses were going to remain confidential and would be used for research purposes only. Cameron and Price (2009:xix) describe issues of ethics in a research context as those of acting ethically and honestly.

3.7 Summary

The previous chapter presented a theoretical perspective of knowledge-management, the emphasis being on essential elements of the knowledge-management philosophy.

As mentioned earlier, covered in this chapter is data collection, population, sampling, and data analysis. The type of methodology used was informed by a number of critical factors which include research objectives, and the nature of the population. The next chapter will present the findings of this study.

Chapter 4: Data analysis and interpretation of findings

4.1 Introduction

The previous chapter presented the methodology used in this research project. The main focus of this chapter is to analyse, interpret, and present the findings of this research project. This chapter also makes a logical link between the research objectives of this research project, the literature review, research question, research design, and the findings. Tables and graphs are used to present the findings in a meaningful manner. For data analysis, SPSS version 20.0 was used in this study. The self-administered questionnaire method was used in collecting data from DUT library employees. 70 questionnaires were distributed; a response of 62% was achieved. The theory on knowledge-management was the shaping of the direction of the study in the form of a literature review, research objectives, formulation of the research question, and the interpretation of the findings.

4.2 Descriptive statistics.

According to Sekaran (2013:393), descriptive statistics is the type of statistics that gives descriptive information about data collected from participants in the research project. In presenting the findings of this study in a meaningful manner, pie charts, tables, and graphs have been used. The theoretical perspective of knowledge-management has also been used in making clear sense of the findings.

Figures are used to present the findings for the purpose of giving more meaning to the research findings. Interpretation of the findings is provided below each figure which is used to present the findings. The first part of this chapter provides bibliographic information of the participants; and the second part relates to participants' views on knowledge-management philosophy.

4.2.1 Years of service

In this section participants were ask to indicate the number of years they have spent working for the DUT library. The purpose of such information was to gain a sense of length of time participants have been in the employ of the DUT library.
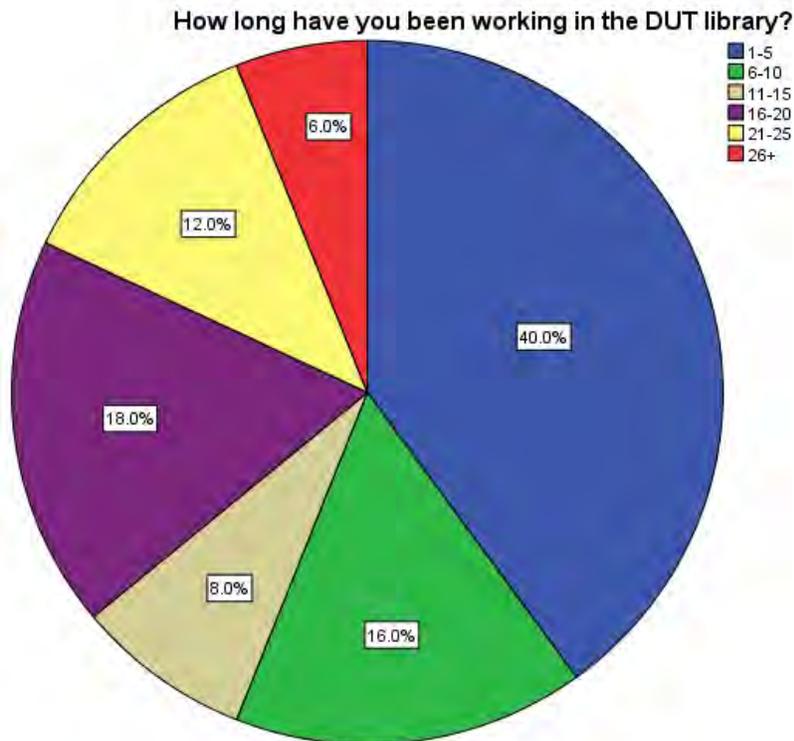

Figure 4.1 Years of service

The results of the study indicated that the majority of the participants have been working for Durban University of Technology library for five years or less. However, Figure 4.1 shows that 18.0% of the participants have been in the employ of the DUT library for sixteen to twenty years. The results also confirm that 16.0% of the participants have been employed in the DUT library for six to ten years. From the knowledge-management perspective, DUT library has the workforce with experience and expertise which could be used effectively by the implementation of knowledge-management philosophy.

4.2.2 Qualifications of respondents

What is your highest qualification?

Legend:
- Masters
- B.Tech
- Diploma
- Grade 12 (Matric)
- Other

12.2% (Other)
12.2% (Masters)
8.2% (B.Tech)
22.4% (Grade 12 Matric)
44.9% (Diploma)
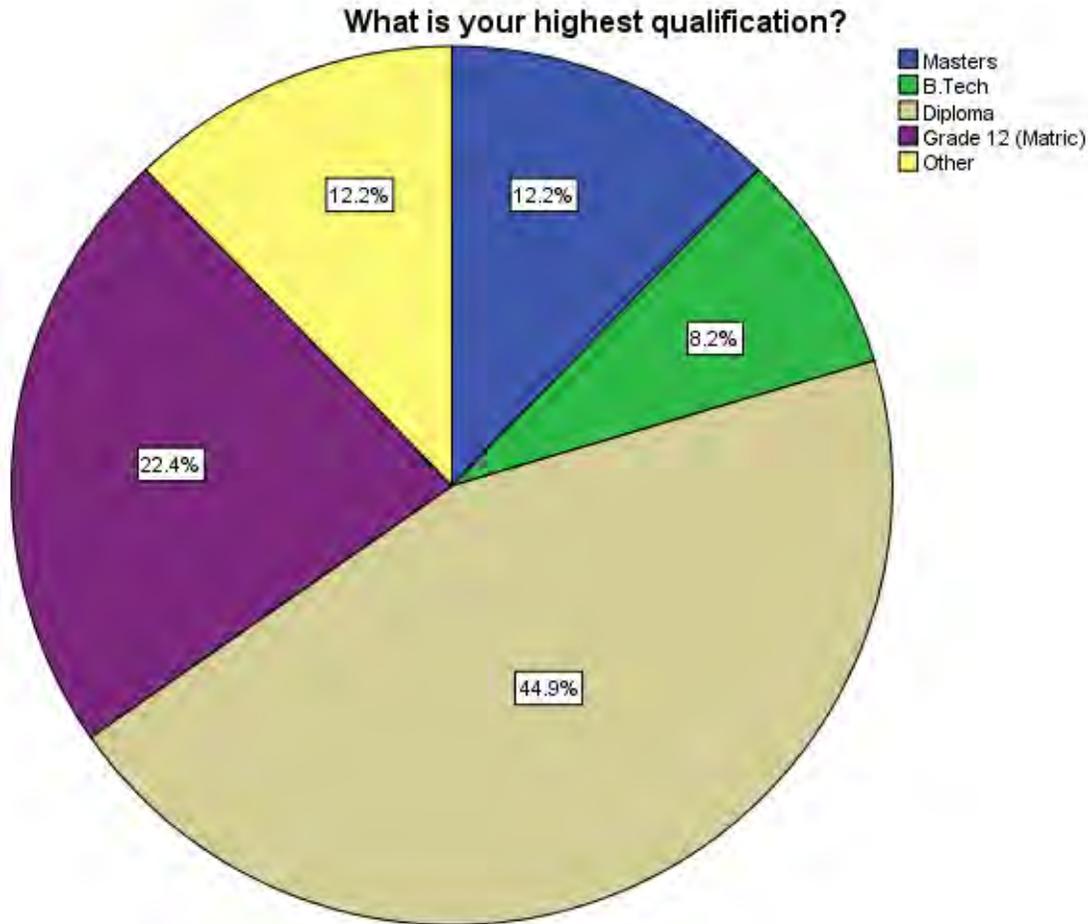
Figure 4.2 Participants and their qualifications

The study found that the majority of the participants at 44.9% have a diploma as a highest qualification. It was necessary to gain a sense of employees' level of education, because knowledge-management is about using and developing the core competencies of the workforce in achieving the organisational goals. Participants with a Master's qualification are at 12,2%. The findings also indicate that participants at 8.2% have a BTech Degree as the highest qualification. From the results, it emerges that there is a mixture of qualification levels for library employees at DUT.

4.2.3 Gender of respondents

The table and figure below reveal the gender representation of the participants.
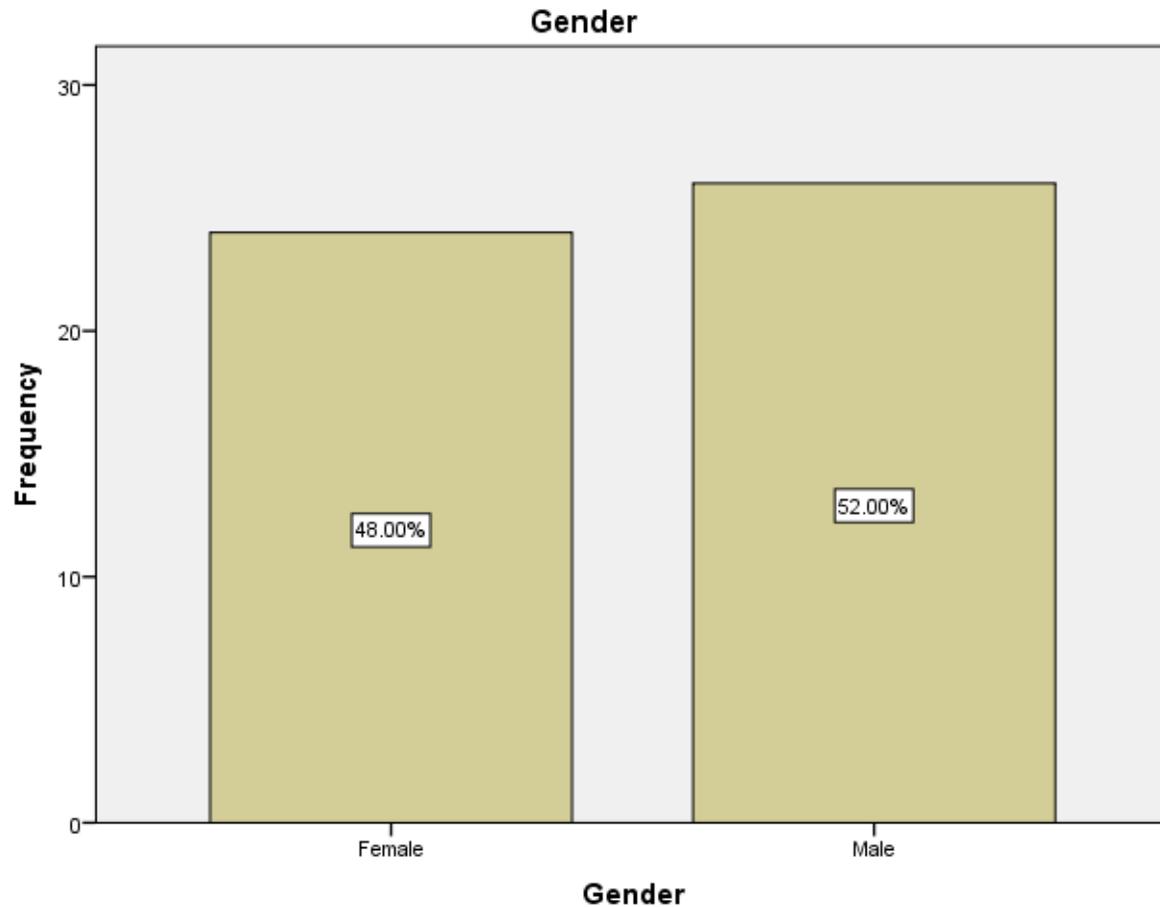

Figure 4.3 Gender

In terms of gender representation of the participants, Figure 4.3 shows that 52% were male, while female participants constituted 48%. Based on the results of the study, gender representation was relatively marginal between males and females. This information was critical as gender representation in the workplace is enshrined in labour laws.

4.3 Sharing of best practices in DUT library

Presented in the graph below are the participants' perceptions on knowledge management and sharing of best practices.
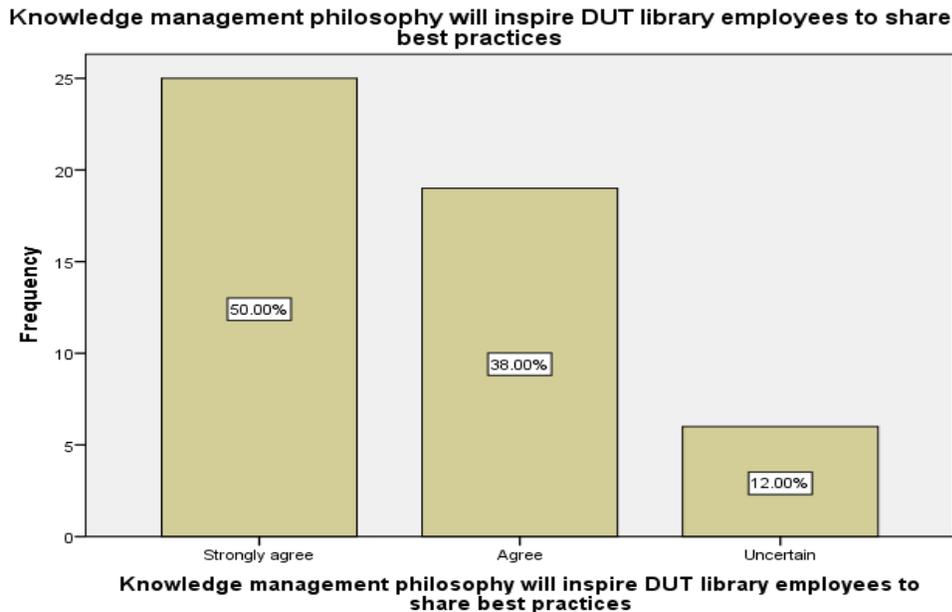
Figure 4.4 Knowledge management and sharing of best practices.

The majority of the participants are of the view that the implementation of a knowledge-management philosophy will promote sharing of best practices across departments in the DUT library. These findings are an indication that participants are positive that knowledge-management will create the culture of knowledge-sharing in improving the effectiveness of the library service. The findings also indicate that participants understand the value of sharing best practices. The findings are supported by Maponya (2005:908), who stresses that establishing knowledge-sharing platforms enhances the effectiveness of knowledge-sharing within an organisation.

4.4 Continuous improvement of business operations within the DUT library

This statement solicited the views of participants with regard to whether knowledge-management will assist DUT library to continuously improve its processes and operations.

Knowledge management philosophy will help to continuously improve business operations of the DUT library
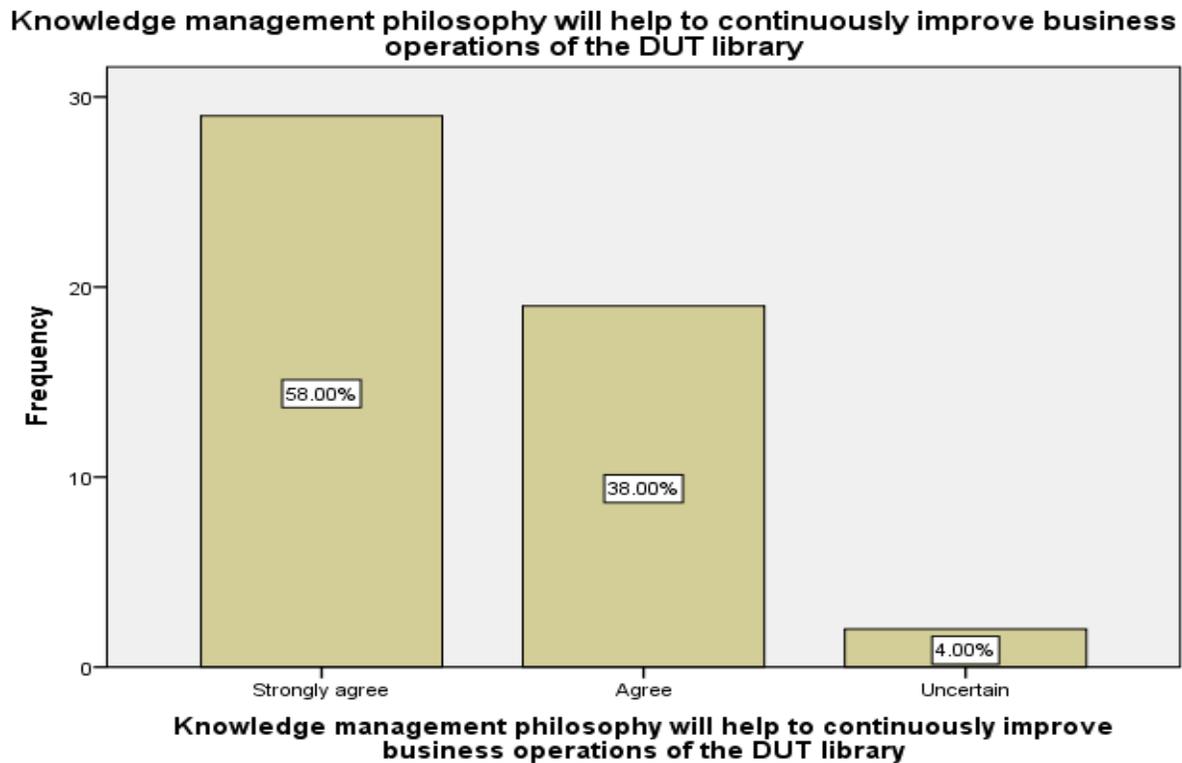
Figure 4.5 Knowledge management and continuous improvement.

The results of the study reveal that the majority of participants at 58% strongly believe that the implementation of a knowledge-management philosophy will assist in continuously improving business operations of the DUT library. Maponya (2005:901) reiterates that knowledge-management places an organisation in a position to deal with challenges in an effective manner. It has also been emphasised by Styn and du Toit (2009:2) that implementing knowledge-management stimulates innovation and a continuous improvement of services and products.

4.5 Knowledge-management and capacity-building for library employees

This statement is part of the objectives of this study. This statement sought to gain the perceptions of participants on whether knowledge-management will be effective in facilitating capacity-building of library employees at DUT.
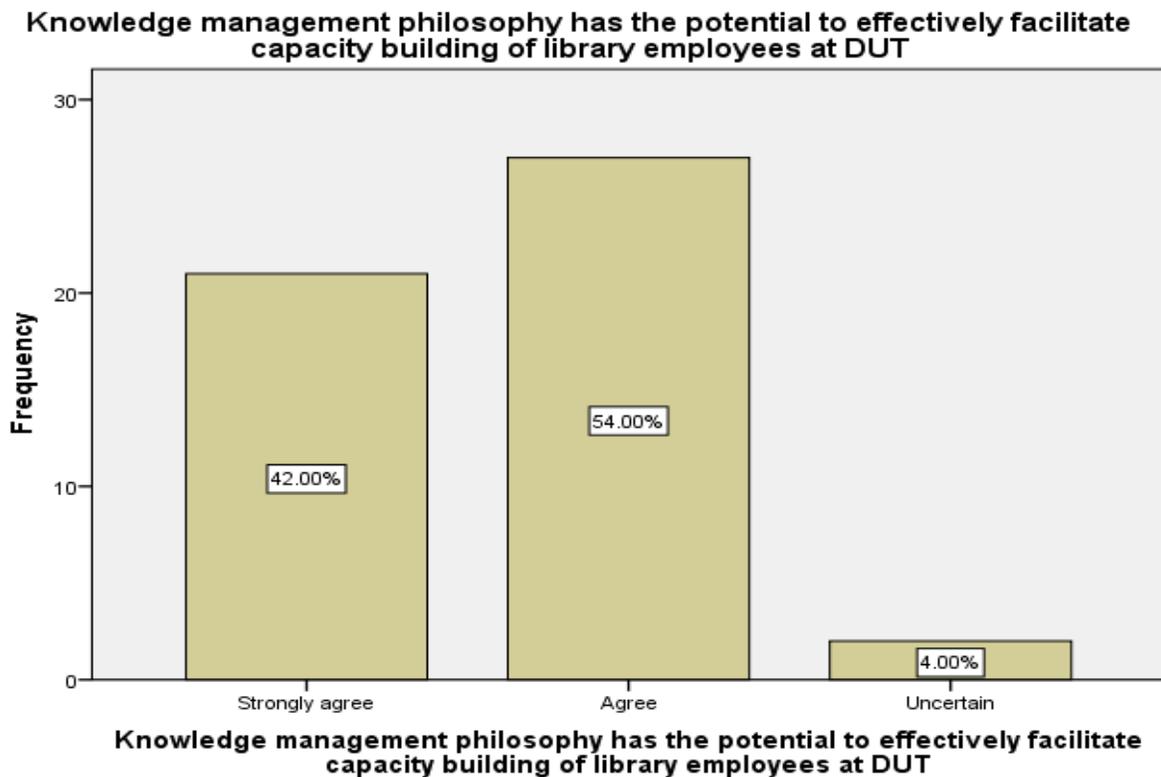

Figure 4.6 Knowledge management and capacity development.

Based on the results as presented in Figure 4.6, the majority of participants agree that the implementation of knowledge philosophy will effectively assist with capacity-development of library employees at DUT. In fact, 54% agree, while 42% indicated that they strongly agree that implementation of a knowledge-management philosophy will

contribute positively in terms of capacity-development of library employees. Knowledge-management promotes the culture of interaction and collaboration in sharing insights and facilitating knowledge sharing (Mavodza and Ngulube 2012:1).

4.6 Implementation of a knowledge-management philosophy

A knowledge-management philosophy has not yet been implemented at DUT library. The study intends to establish whether employees will embrace the implementation of such a philosophy.
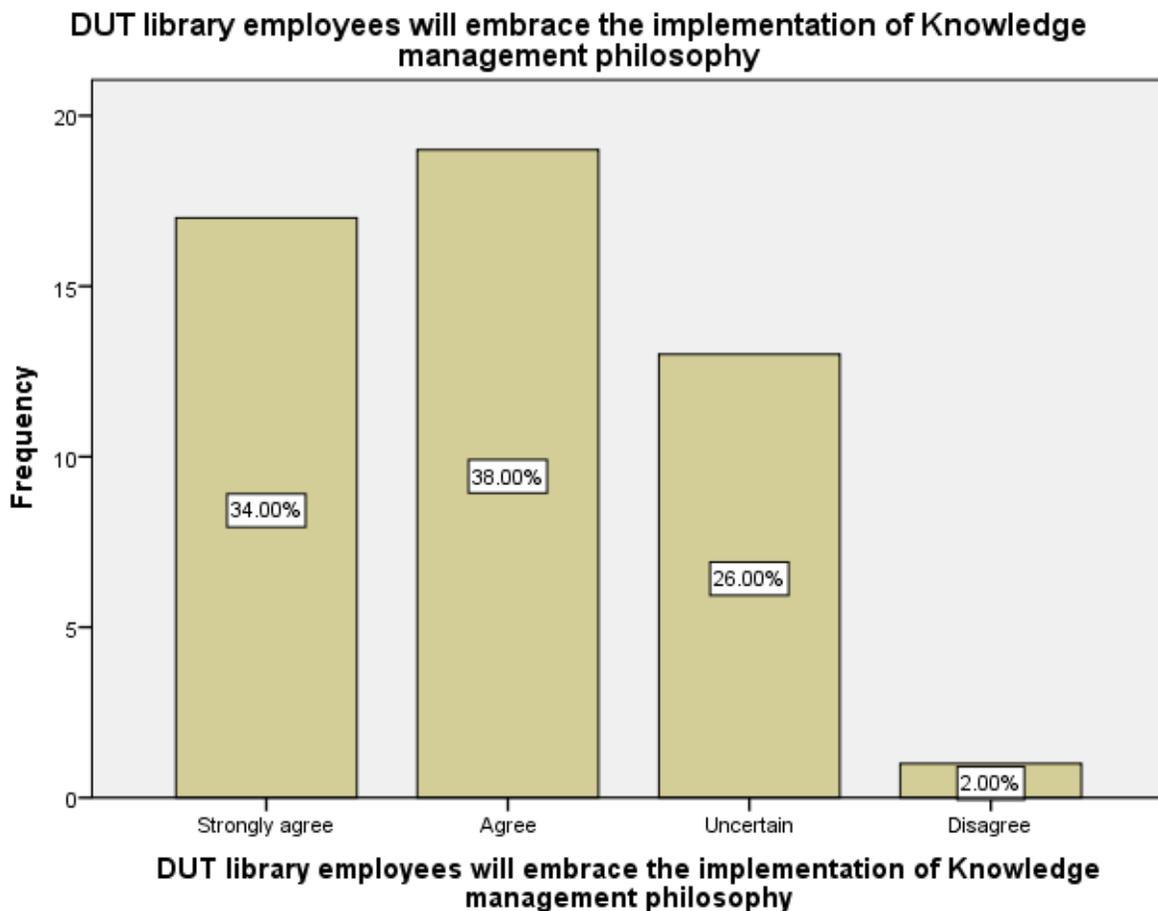
Figure 4.7 Knowledge management implementation.

Most of the participants are positive, demonstrating a willingness to embrace the implementation of a knowledge-management philosophy, should DUT library decide to adopt and implement such a philosophy. This proves that participants recognise that

powerful forces in the higher education environment continue to reshape the education landscape. Hence, a knowledge-management philosophy encourages employees to continuously develop and utilise their capacity for achieving common goals.

4.7 Knowledge-management as a tool by which to achieve strategic objectives

This statement was used to ascertain the perceptions of the participants on whether knowledge-management will assist DUT library in achieving strategic objectives. The figure below presents responses.
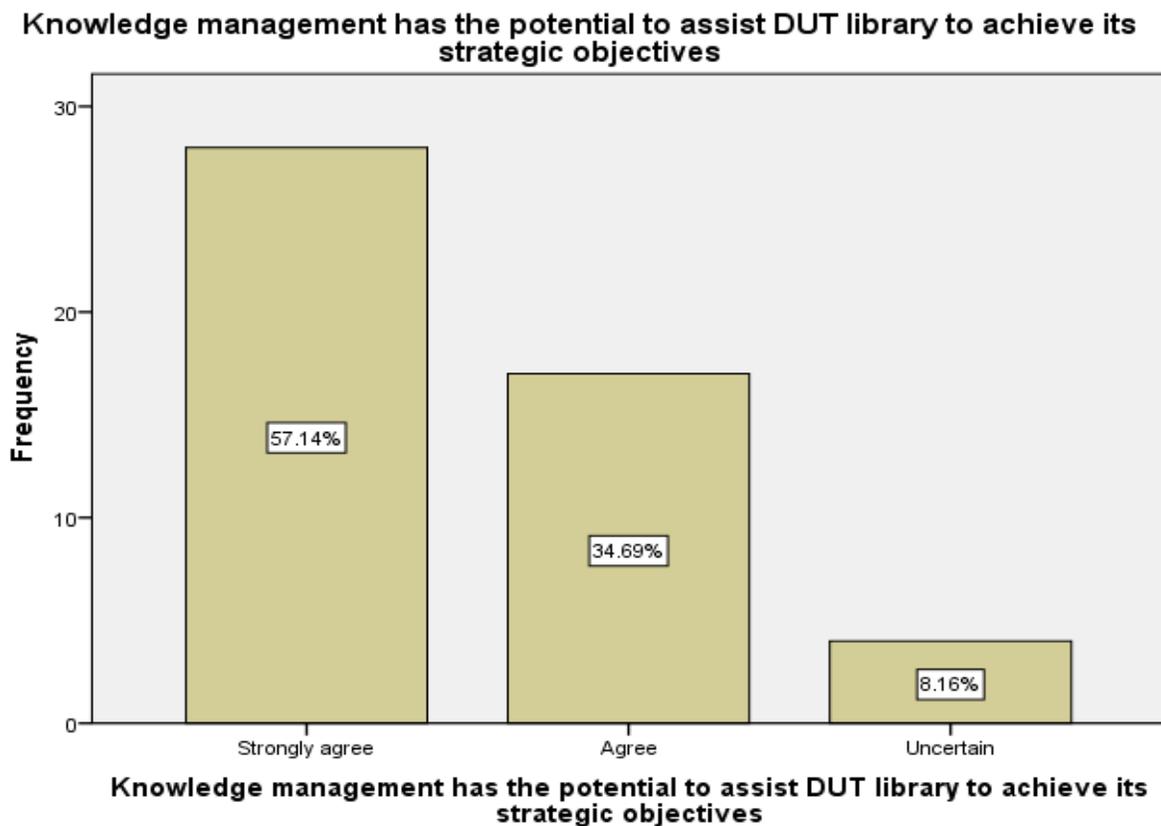

Figure 4.8 Knowledge management and strategic goals.

For responses relating to the extent to which implementation of knowledge-management will assist the DUT library to achieve its strategic objectives, the majority of participants at 57.14% are of the view that certainly implementing a knowledge-

management philosophy will assist the DUT library to achieve strategic objectives. Martensson (2000:204) is in agreement with these findings, as he reiterates that knowledge-management is both a survival mechanism and a tool by means of which to achieve strategic objectives.

4.8 Knowledge-management as a source of inspiration for providing excellent services

Knowledge management will serve as an overarching philosophy (dominant culture) that inspires library employees to provide excellent service at DUT

Knowledge management will serve as an overarching philosophy (dominant culture) that inspires library employees to provide excellent service at DUT
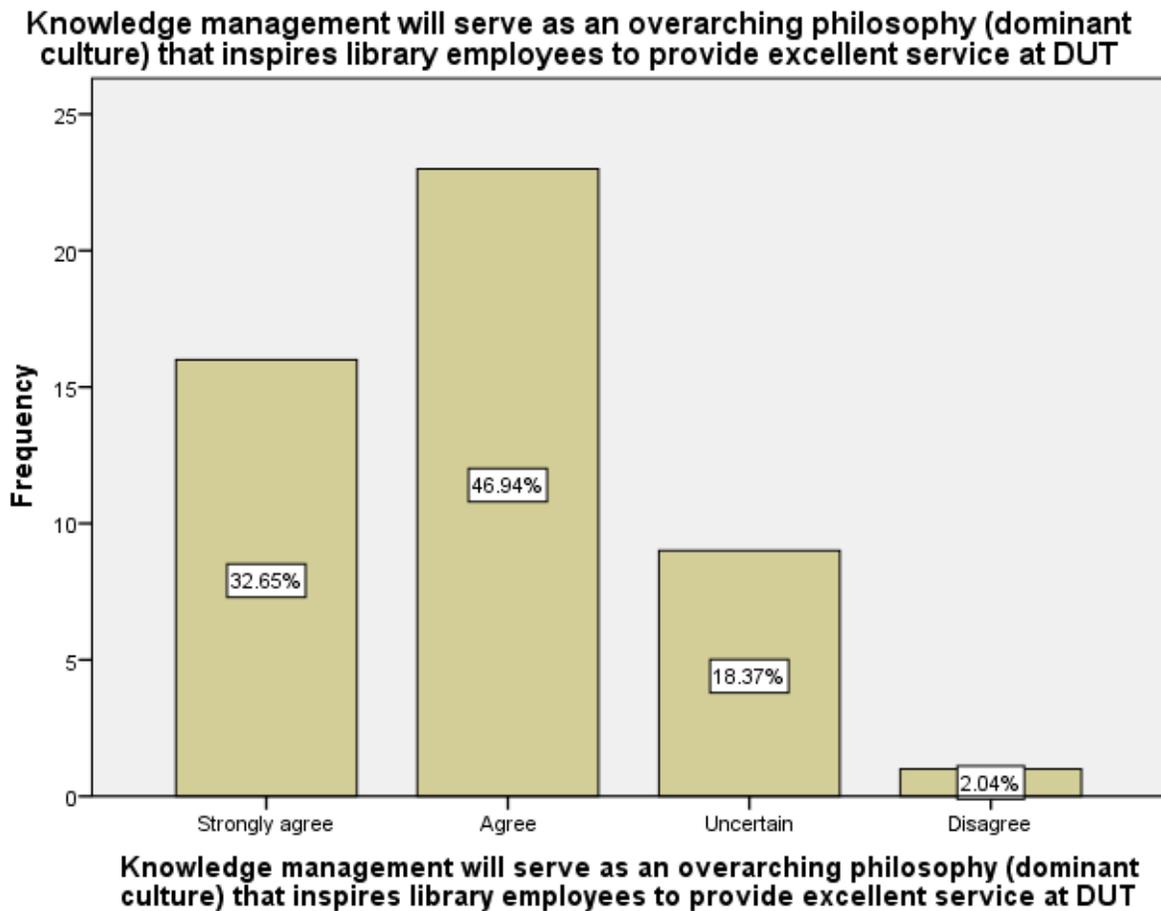
Figure 4.9 Knowledge management and the provision of excellent service.

Responses as presented in Figure 4.9 show that most of the participants agree that knowledge-management will certainly help as an overarching library philosophy inspiring library staff to provide excellent services at DUT. This confirms what has been

stated by Mavodza and Ngulube (2012: 2) that knowledge-management practices contribute towards improving and sustaining of organisational effectiveness.

4.9 Summary

The previous chapter presented the research methodology used in collecting data from the participants. This chapter confirms the achievement of the objectives of this study. The findings of this study reveal that the majority of employees demonstrate a positive attitude towards the implementation of a knowledge-management philosophy in the DUT library. During the data collection process, enthusiasm levels from participants were very encouraging. The next chapter is the final chapter of this research project, covering the conclusion and recommendations.

Chapter 5: Conclusion and recommendations

5.1 Introduction
This is the final chapter presenting the conclusion and the recommendations based on the results of this study. The previous chapter presented the results of this research project. Data were collected from library employees at the DUT by means of a self-administered questionnaire. Besides presenting the conclusion and recommendations, this chapter is also used to indicate a logical link between the research objectives, critical research questions, and the previous chapters of the study. Part of this chapter is to show the extent to which objectives of the study were achieved, and the critical research question answered. The study was conducted without any major challenges; participants demonstrated positive energy and the willingness to participate in this study. The conclusion and recommendations are based on the interpretation of the findings, as presented in Chapter 4.

This research project was conducted to achieve four specific research objectives which are outlined below.

The objectives of the study were:

- To determine the perceptions of library employees on whether a knowledge-management philosophy will improve library services at DUT;

- To determine the perceptions of DUT library employees on whether knowledge-management will enhance their capacity-development

- To determine whether knowledge-management will facilitate effective sharing of knowledge across departments in the DUT library; and

- To determine whether knowledge-management will inspire librarians to work as a collective towards a common goal at DUT.

5.2 Achievement of the research objectives

The study was conducted in order to achieve the above-mentioned research objectives. Evaluation of the findings indicate that the study was successful in achieving those stated objectives. The study was able to ascertain the perceptions of library employees on whether implementing a knowledge philosophy will improve their effectiveness.

Objective 1: The study was able to determine the perception of library employees on whether knowledge-management will improve library services at DUT. The results reveal that the majority of the participants are in agreement that implementation of a knowledge-management philosophy will in fact inspire library employees to provide excellent services at DUT.

Objective 2:The results show that the majority of the participants agree that implementation of knowledge-management in the DUT library will enhance development of their capacity.

Objective 3: the study achieved the objective of determining whether knowledge-management will facilitate effective sharing of knowledge across departments within the DUT library. The findings reflect that the majority of participants believe that implementation of knowledge-management will facilitate effective knowledge-sharing across departments within the DUT library.

Objective 4: The study was able to ascertain whether if knowledge-management has the potential to help DUT library achieve its strategic objectives. Based on the findings, the majority of participants at 57% strongly believe that knowledge-management has the potential to assist the DUT library achieve its strategic objectives.

5.3 Overview of study findings

The overall analysis of the finding gives an indication that participants are very positive about the implementation of a knowledge-management philosophy in the DUT library. Presented below is an overview of the findings.

The majority of the participants indicated that they strongly agree that knowledge-management will inspire DUT library employees to share best practices.

The majority of participants at 58% are positive that implementation of a knowledge-management philosophy will help to continuously improve business operations of the DUT library.

The results of the study reveal that 54% of participants view knowledge-management as a philosophy that will facilitate the development of capacity for library employees at DUT.

The findings reflect that participants will embrace the implementation of a knowledge-management philosophy.

The results show that 57% of participants strongly believe that implementation of a knowledge-management philosophy will help DUT library to achieve strategic objectives.

Interestingly, the results reveal that participants view knowledge-management as an effective philosophy that will inspire library employees to provide excellent service at DUT.

5.4 Conclusion

Flexibility and the ability to respond to complex challenges has become critical for academic libraries given the fact that they are part of an academic environment which is faced with challenges from different directions. Demonstrating her understanding of the academic environment Minishi-Majanja (2009:48) stresses that operating in an ever-changing environment, there is a great need for organisations to redesign their processes and operations in line with the new trends and perspectives. Knowledge-management is no longer regarded as relating to information and technology. It stimulates capacity development; it has become a source of inspiration and creativity by which employees create the real value for their organisations. Knowledge-management is effective in fostering a culture of continuous and collective learning so that organisations remain competitive.

As mentioned in Chapter1, the objectives of the study were to determine the perceptions of DUT librarians on whether the application of knowledge-management will improve library services at DUT. Knowledge in an organisation is regarded as a strategic resource to be managed effectively in order for an organisation to achieve strategic goals. Academic libraries (university libraries) are directly affected by complex issues that are faced by academic institutions. To respond effectively to such challenges, traditional ways are no longer effective; hence knowledge-management is the best option for academic libraries and parent institutions (higher education institutions). Implementation of knowledge-management has many benefits.

5.5 Recommendations and future research

This study was successful in determining the perceptions of library employees on whether knowledge-management will improve their effectiveness at DUT. However the study could not address all the critical elements for the successful implementation of knowledge management philosophy. The study makes the following recommendations for future research.

- implementation of a knowledge-management philosophy in improving business results within the UoTs.

- achieving competitive advantage through knowledge-management within the UOTs.

- implementing knowledge-management to improve services offered by academic libraries.

- promoting sharing of best practices in order to improve business results of the academic libraries.

- establishing communities of practice to promote knowledge sharing in academic libraries.

- creating a knowledge-sharing culture thereby achieving strategic goals within the academic libraries.

5.6 Limitations

The study was conducted at DUT library, however, the focus was library employees in Durban campuses only. For logistical reasons library employees based in DUT Midlands campuses were not part of the study.

5.7 Summary and concluding remarks

Overall, this research project has highlighted the significance of knowledge management philosophy to help organisations achieve competitiveness and organisational effectiveness. The study also highlighted the perceptions of librarians towards knowledge management in academic libraries. Empirical data used in this study was collected from librarians at DUT and self-administered questionnaire was used.

The findings of the study confirm that library employees are positive about the implementation of knowledge-management philosophy at DUT.

The findings show that through the implementation of a knowledge-management philosophy DUT library will achieve its strategic goals.

Based on the findings, DUT library will not have challenges in implementing a knowledge-management philosophy from the employees' perspective, because participants indicated that they will embrace knowledge-management should it be implemented in the DUT library.

List of references.

Attenbury,R and Henrich, K J. 2010. *Communities of practice at an academic library: a new approach to mentoring at the university of Idaho.* The Journal of Academic Librarianship, 36 (2):158-165.

Babbie, E. 2013. *The practice of social research, 13th ed.* Canada: Cengage.

Bessick, J and Naicker, V. 2013. *Barriers to tacit knowledge retention: an understanding of the perceptions of the knowledge-management of people inside and outside the organisation.* South African Journal of Information Management, 15 (2): 1-8.

Bhengu, J. 2009. I*nnovation through people.* Management today, 27(8): 41-42

Borzillo, S 2009. *Top management sponsorship to guide communities of practice* (online) ,13(3): 60-72. Available : http://www.emeraldinsight.co.za   (Accessed 10 June 2013).

Buzuijen, X M, van Dam, K and Thierry, H 2010 *How leaders stimulate employee learning: a leader –member exchange approach.* The journal of Occupational and Organisational Psychology,83: 673-693.

Cameron, S and Price, D 2009. *Business research methods: a practical approach.* London: CIPD.

Canary,H.E and Mc Phee, R D. 2011. *Communication and organisational knowledge: contemporary issues for theory and practice.* New York: Routledge.

Chang, R D and Cho, H. 2008. *Organisational memory influences new product success.* Journal of Business Research, 61:13-23.

Chen, D and Liang, T. 2011. Knowledge evolution strategies and organisational performance: a strategic fit analysis. Electronic Commerce Research and Applications (online),10:75-84. Available: http://elsevier.com/locate/ecra (accessed 24 October 2013)

Chetty, L and Mearns, M. 2012. *Using communities of practice towards the next level knowledge-management maturity.* South African Journal of information management (online), 14(1): 1-9. Available at www.sabinet.co.za. (accessed 10 March 2013).

Clegg, S and Kornberger, M. 2011. *Managing and organisations: an introduction to theory & practice.* London: Sage.

Coetzer, A. 2007. *Employee perceptions of their workplaces as learning environment.* Journal of Workplace Learning, 19 (7): 417-434.

Dalkir, K 2011. *Knowledge-management in theory and practice, 2nd ed.* London: Cambridge.

Damons, D. 2011. *Management of systems.* Management Today, 27(4): 53-57.

Delserone, L, Kelly, J and Kempf, J. 2009. Grant funding workshops help faculty, staff and graduate students. Library connect,7(2): 4-5.

Dube, L. 2011. *Quality assurance practices in university libraries in South Africa.* South African Journal of Library and Information Science (online), 77(1) : 26-36. Available: www.search.sabinet.co.za (Accessed 9 November 2013).

Dube, L and Ngulube, P. 2013. *Pathways for retaining human capital in academic departments of a South African universi*t*y.* South African Journal of Information Management, 15 (2): 1-8.

Du Pre, R. 2009. *The place a role of Universities of Technology in South Africa.* Durban: Durban University of Technology

Dymock, D. *Towards a learning organisation? Employee perceptions.* The learning organisation, 13 (5):525-536.

Fox, W and Bayt, M S. 2007. *A guide to managing research.* Cape Town: Juta

Friskney,D.2009. *How mobility is challenging academic libraries* (online). Available:www. elsevier.com/libraryconnect (Accessed 3 October 2013).

Furseth, I and Everett, E. U. 2013. *Doing your Master's dissertation: from start to finish.* London: Sage.

Gaffoor, S and Cloete, F. 2010. *Knowledge-management in local government: the case of Stellenbosch Municipality.* South African Journal of Information Management,12 (1):1-7.

Graziano, A M and Raulin, M L. 2013. *Research methods: a process of enquiry 8th ed.* Boston: Pearson.

Greenberg, J and Baron R.A 2008. *Behaviour in organisations 9$^{th\ ed}$.* London: Pearson.

Haag, S, Baltzan, P and Phillips, A. 2008. *Business driven technology.* Boston: McGraw-Hill.

Hufford, J R. 2013. *Can the library contribute value to the campus culture for learning?.* The Journal of Academic Librarianship (online), 39:288. Available: http//:www.sciencedirect.co.za (accessed 2 November 2013).

Jain, P and Mutula, S. 2008. *Libraries as learning organisations: implications for knowledge-management.* Library Hi Technology News (online) 8: 10-14. Available at www.emeraldinsight.com. (accessed 30 October 2013).

Jantz, R C. 2012. *Innovation in academic libraries : an analysis of university librarians' perspective.* Library and Information Research, 34: 3-13.

Jashapara, A. 2011. *Knowledge-management: an integrated approach 2nd ed.* London: Prentice Hall.

Kim, S and Ju, B. 2008. *An analysis of faculty perceptions: Attitudes toward knowledge sharing and collaboration in an academic institution.* Library and Information research (online),30:282-290. Available: www.sciencedirect.co.za (Accessed 6 November 2013).

Kimble, C.2013. *What cost knowledge-management? : the example of Infosys.* Global Business and organisational Excellence. 32 (3):6-14.

Kyndt, E, Dochy, F and Nijs, H. 2009. *Learning conditions for non-formal and formal workplace learning.* Journal of workplace learning (online), 21(5):369-383. Available at www.emeraldinsight.com. (Accessed 29 October 2013).

Laal, M. 2010. *Knowledge-management in higher education.* Procedia Computer Science 3: 544-549.

Lia, S, Chang, W and Wu, C. 2010. *An Integrated model for learning organisation with strategic view: benchmarking in the knowledge-intensive industry.* Expert systems with application (Online): 3792-3798. Available at www.elservier.com/locate/eswa (Assessed 25 October 2013).

Lyles, M A. 2013. *Organisational learning, knowledge creation, problem formulation and innovation in messy problems.* European Management Journal. (online): 1-5. Available at www.elservier.com/locate/emj. (Accessed on 29 October 2013).

Maponya, P. M.2005.*Fostering the culture of knowledge management in higher education.* South African Journal of Higher Education, 19 (6):900-911.

Mavodza, J and Ngulube, P. 2011. *Exploring the use of knowledge of management practices in an academic library in a changing information environment.* South African Journal of Library & Information Science (online),77(1):15-25. Available at www.sabinet.co.za. (Accessed on 9 March 2013).

Minishi-Majanja, M K. 2009. *The higher education qualifications framework and the changing environment of LIS education and training in South Africa: some observations.* South African journal of library and information science (online), 75(2): 148-158). Available at www.sabinet.co.za. (Accessed on 10 March 2013).

Mottaghi-far, H. 2012. *Employing a knowledge-management process in academic and research libraries: a productive thinking one*. Interdisciplinary journal of contemporary research in business (online), 3 (9): 1468-1479. Available at www.epnet.com. (accessed on 4 March 2013).

Nazim, M and Mukherjee, B. 2013. *Librarians' perceptions of knowledge-management in developing countries: A case with Indian academic libraries*. The international Information and Library Review,

Newell, S and Robertson, M.2002. *Managing knowledge work*. New York: Palgrave.

Nkosi, D,Leach and Hoskins, R. 2011. *Knowledge and use of library resources by academic staff at the University of KwaZulu-Natal, Pietermaritzburg campus*. Innovation (42): 54-64.

Noe, R A and Hollenbeck, J R. 2007. *Fundamentals of human resource management 2nd ed*. Boston: McGraw-Hill.

Ofluoglu, G and Somunoglu, S 2012. *The concept continuing education for organizations and its effects*. Human systems management (online), 31:187-191. Available at www.epnet.com. (accessed on (12 June 2013).

Oliver, P 2012. *Succeeding with your literature review: a handbook for students.* England: Open university.

Parker, A. 2006. *Thinking world-class: continuous improvement and relentless innovation*. Management today (online), Available at www.sabinet.co.za. (Accessed 4 March 2013).

Pellissier, R. 2012. I*nnovation in a complex environment.* South African Journal of information Management. Vol.14(1) :1-14.

Porumbeanu, O. 2010. *Implementing knowledge management in Romain academic libraries: identifying the elements that characterize their organisational culture*. The Journal of academic librarianship. 36(6): 549-552.

Prusak, L . 1997. *Knowledge in organisations: resources for knowledge based economy*. Johannesburg: Butterworth-Heinemann.

Robbins,S P 2009. *Organisational behaviour: Global and Southern African perspectives*. Cape Town: Pearson.

Robbins, S P, De Cenzo, D A and Coulter, M.2013. *Fundamentals of management: essential concepts and applications 8th ed.* New York: Pearson.

Saunders, M, Lewis, P and Thornhill, A. 2012. *Research methods for business students.* England : Pearson

Schwarzwalder, R. 2011. *The changing face of academic libraries: why less space does not must mean less impact.* Library connect. 9 (1):1-11.

Sewdass, N and Theron, J C. 2004. *Towards a framework for continuing professional development of library and information service personnel in South Africa.* Mousaion, 22 (1):103-118.

Tanloet, P and Tuamsuk, K 2011. *Core competencies for information professional of Thai academic libraries in the next decade (A.D 2010-2019).* The international Information and library review. 43:122-129.

Wagner, C, Kawulich, B and Garner, M. 2012. *Doing social research: a global context.* London: McGraw-Hill.

Wenger, E. 2003. *Communities of practice, learning, meaning and identity.* United Kingdom: Cambridge University.

Wenger, E. M, Dermott,R and Snyder, W M. 2003. *Cultivating communities of practice.* Boston: Harvard Business.

Yang, J and Wan, C. 2004. *Advancing organisational effectiveness and knowledge-management implementation.* Tourism Management, 25: 593-601.

Young, J. 2008. *Individual attitudes and organisational knowledge sharing.* Tourism Management, 29:345-353.

Graduate School of Business and Leadership Studies
University of KwaZulu-Natal
Westville Campus
Durban
4000
10 July 2013

LETTER OF INFORMATION AND CONSENT

Title of the study: Perceptions of Durban University of Technology Librarians on whether knowledge-management will improve their effectiveness.

Dear Participants.

I am currently undertaking a research study that aims to determine the perceptions of Durban University of Technology Librarians on whether knowledge-management will improve their effectiveness.

Would you agree to complete the questionnaire for the study?. Completing the questionnaire will take few minutes. Participation in the study is voluntary and you are free to withdraw from the study from the study at any time without giving reasons. The information you give, will only be used for research purposes and your identity and answers will be kept totally confidential. Should you wish to discuss this further, please feel free to contact on 031-3735243 or my supervisor on 0829010225.

Your assistance will be much appreciated.

Yours Sincerely

Patrick Mbongwa Mhlongo (student no.208523525)
patrickm@dut.ac.za

……………………………….

Please complete the following as confirmation of your willingness to participate in this research project.

I, ………………………………………………………………, have adequately discussed the study with the research, understand that I may withdraw from the study at any time without giving reasons. I voluntary agree to participate by completing the questionnaire.

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

PERCEPTIONS OF DURBAN UNIVERSITY OF TECHNOLOGY LIBRARIANS ON WHETHER KNOWLEDGE-MANAGEMENT WILL IMPROVE THEIR EFFECTIVENESS.

Please complete the following questionnaire as frankly as possible and where necessary indicate your option by means of a cross (X). Your input will be greatly appreciated and your confidentiality ensured.

SECTION A: BIBLIOGRAPHICAL INFORMATION

1. How long have you been working in the DUT library?

No. of years	Select one
1-5	
6-10	
11-15	
16-20	
21-25	
26+	

2.What is your highest qualification?

Qualification	Select one
Doctorate	
Masters	
BTech	
Diploma	
Grade 12 (Matric)	
Other	

3. Gender

Gender	
Female	
Male	

SECTION B: YOUR PERCEPTIONS ON KNWOLEDGE MANAGEMENT PHILOSOPHY

4. Knowledge-management philosophy will inspire DUT library employees to share best practices.

Perceptions	Select one
Strongly agree	
Agree	
Uncertain	
Disagree	
Strongly disagree	

5. Knowledge-management philosophy will help to continuously improve business operations of the DUT library.

Perceptions	Select one
Strongly agree	
Agree	
Uncertain	
Disagree	
Strongly disagree	

SECTION C: CAPACITY DEVELOPMENT

6. Knowledge-management philosophy has the potential to effectively facilitate capacity-building of library employees at DUT.

Capacity development	Select one
Strongly agree	
Agree	
Uncertain	
Disagree	
Strongly disagree	

SECTION D: ORGANISATIONAL PERFORMANCE

7. DUT library employees will embrace the implementation of a knowledge-management philosophy.

Organisational performance	Select one
Strongly agree	
Agree	
Uncertain	
Disagree	
Strongly disagree	

8. Knowledge-management has the potential to assist DUT library to achieve its strategic objectives.

Organisational performance	Select one
Strongly agree	
Agree	
Uncertain	
Disagree	
Strongly disagree	

9. Knowledge-management will serve as an overarching philosophy (dominant culture) that inspires library employees to provide excellent service at DUT.

Organisational performance	Select one
Strongly agree	
Agree	
Uncertain	
Disagree	
Strongly disagree	

SECTION E: GENERAL COMMENTS

10. If there are any general comments that you wish to make relating to the issues raised in this survey, please do so in the space provided below.
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....
....
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Thank you for your co-operation in completing this questionnaire