Implementation of Knowledge Management as a Tool for Sustainable Competitive Advantage at the University of Nairobi Library, Kenya

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DECLARATION

This research project is my original work and has not been submitted for examination to any other university.

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DEDICATION

I wish to dedicate this research work to my late father Augostino Nyamache, dear mother Paskalina Bosibori, wife Josephine Moraa, daughter Diana Nyasuguta, and sons Brian Osoro and Blair Chweya.

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ABSTRACT

University libraries are knowledge hubs established in support of the mission of their parent institutions. Most of the libraries have significantly developed and are utilizing some Knowledge Management (KM) principles to increase their operational efficiency to meet this mandate. Knowledge management offers new ways of enhancing competitive edge despite the challenges occasioned by, among other factors, dwindling library budgets, competition, and user approach to information access and retrieval. The aim of the study was to investigate the implementation of Knowledge Management as a tool for sustainable competitive advantage at the University of Nairobi Library. The study was guided by the following objectives: to determine the extent to which knowledge management is practiced at the University of Nairobi Library; to determine which KM strategies can generate sustainable competitive advantage for the University of Nairobi Library; to evaluate the effectiveness of Knowledge Management as a source of sustainable competitive advantage for the University of Nairobi Library; and to identify the challenges encountered in implementing knowledge management strategies for sustainable competitive advantage in University of Nairobi Library. This research is a case study which was conducted at the University of Nairobi Library. The study used a descriptive research design and purposive sampling technique. Qualitative and quantitative methods were used to analyze data. Questionnaires and interview guide were used to collect data for the study. Data from the returned questionnaires was analyzed using Statistical Packages for Social Sciences (SPSS) and Microsoft Excel software. The analyzed data has been presented using pie charts, tables and graphs. This research made the following findings: the UON library has no central KM policy and its implementation is at the introductory stage, there is no organizational culture which promotes knowledge creation, sharing, retention and reuse, among other challenges. Therefore, the following conclusions were made: formulation and implementation of a knowledge strategy covering policy formulation, knowledge creation, sharing, retention and reuse and training staff in Knowledge Management. The findings of the study add to the body of knowledge in KM practice in university libraries and for library professionals wishing to leverage KM in their libraries will find the research results quite informative.

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LIST OF ABBREVIATIONS AND ACRONYMS

CAVS	College of Agriculture and Veterinary Sciences
IAGAS	Institute of Anthropology, Gender and African Studies
ICT	Information and Communication Technology
IDS	Institute of Development Studies
IM	Information Management
IR	Institutional Repository
KM	Knowledge Management
LIS	Library and Information Science
OPAC	Online Public Access Catalogue
P/G	Postgraduate Students
PSRI	Population Studies and Research Institute
SOL	School of Law
SPSS	Statistical Packages for Social Sciences
UON	University of Nairobi
WWW	World Wide Web

CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.0 Introduction

Knowledge is increasingly being touted as critical in the strategic direction of many successful organizations. It is apparently found everywhere and putting it into effective use is a nightmare for many institutions. Knowledge Management offers the much deserved solution to this problem. However, Knowledge Management (KM) is a wide area of study and its successful implementation and application depends on the organizational culture, structure and strategy of the firm or institution. In Library and Information Science (LIS), Knowledge Management is the process of acquisition, refinement, storage, retrieval, distribution, preservation and re-use of information (Evans, Dalkir and Bidian, 2014: 88-89). Consequently, the race among university libraries for seeking a competitive edge has been through the use of Knowledge Management strategies. Through the implementation of value creating strategies, university libraries are able to overcome competition for their parent institutions globally. Knowledge integration and coordination capabilities which are potential components in achieving sustainable competitive advantage in library and information services are the focus of this research work. This chapter comprises the background of the study, context, problem, aim, objectives, research questions, significance, assumptions, scope, and limitations of the study. It also discusses the operational terms and concepts that have been used in the research study. Since university libraries are academic libraries, the words university and academic are used interchangeably in this study which is limited to the University of Nairobi Library.

1.1 Background to the Study

Tremendous increase in size and the complex nature of university libraries has made it necessary to manage knowledge in a more effective and efficient manner. Consequently, Knowledge Management has become a management strategy of choice for these institutions. Knowledge Management is a new field of management that has emerged in the academic environment which makes it possible to elicit intellectual power available in institutions of higher learning for sharing among community members for growth and enhanced service delivery (Sangeeta, 2015:162). Sharing this knowledge contributes to the creation of new

knowledge which promotes innovation for efficiency and effectiveness. Knowledge Management is a multidisciplinary subject which integrates a wide range of concepts from different disciplines. This includes Library and Information Science where its application has started to gain tremendous momentum (Hussain and Nazim, 2015: 711-712).

The impact of globalization, revolution in the ICTs and õinfoglutö being witnessed on a daily basis has changed the environment in which academic libraries operate. The advent of digital libraries calls for the development of new competences among information professionals to enable them to cope with increasing demand for efficiency and effectiveness in service delivery. Admittedly, the development of digital systems has enabled the deployment of technological solutions for the management of knowledge in order to achieve millennium goals and social value for the community of users (Makori and Mauti, 2016: 1).

The ultimate goal of Knowledge Management in university libraries is to provide the clientele with a variety of value added services in order to improve communication, use, and creation of new knowledge (Kumar, 2010: 28). Alternatively, by improving knowledge access through the web-OPAC, and applying new technology to disseminate information via hyperlinks, university libraries contribute immensely towards worldwide access, re-use and creation of new knowledge. The approach to information access and retrieval has tremendously changed to a point where university libraries have to rethink the manner in which to operate in order to remain relevant. For better and clear discussion of this phenomenon, the underlying concepts and terminologies of Knowledge and Knowledge Management should be understood in the manner they apply in LIS and are thus explained below.

1.1.1 Knowledge

Knowledge is defined by Hussain and Nazim (2015: 715) as information which is combined with experience, context, interpretation and reflection. The authors describe it further as justified personal belief which increases oneøs capacity to act effectively. Knowledge is better understood by looking at its progression from data to information and eventually knowledge.

According to Kumar (2010: 25) data are simple discrete facts, scattered numbers, writings or symbols. They are figures like characteristics, amounts, and names. When data are organized in a manner which gives meaning to their relationship, they become information.

Information is described as data which has been organized and given meaning which can be communicated. It is therefore, analysed and organized data. Information is visible, duplicable and easily transferable. Further, when information is combined with experience and skills, it can result in creating new Knowledge (Rajurkar, 2011: 6).

Knowledge is invisible and is closely related to action and decision making. It is transferable through learning and it is not duplicable (Rajurkar, 2011: 6). Knowledge can be acquired through in-house training, education, seminars, mentoring, conferences and workshops. When it is shared among employees, it is the heart and soul of an institution's performance. According to Ohiorenayo and Eboreime (2014: 402) the value of knowledge will keep on appreciating when a person shares the knowledge and this process of knowledge transfer does not make the knowledge bearer to lose it. Knowledge can be divided into two types: tacit and explicit.

1.1.3 Tacit Knowledge

Tacit knowledge is difficult to describe and transfer. It resides in the minds of individuals and includes lessons learned, expertise, judgments and intuition. It is the knowledge an individual gains through experience and observation; through trial and error (Roy, 2015: 21). It is generally appreciated that every employee has deeply rooted tacit knowledge in ones commitment to a particular activity. When this knowledge is shared, it becomes the backbone of an organization's success. Tacit knowledge can be passed on through conversation and observation. This is because it is õKnow-Howö which is embedded in an individual's mind and can also be said to reside in the organization's processes and procedures.

Tacit knowledge is purely personal and is not communicated in written form. It is context-specific and hard to formalize and communicate. It is vital information which is maintained as trade secrets by the individual owner or organization. Unlike explicit knowledge, tacit knowledge is difficult to share. Though, through effective communication among employees, this type of knowledge can be shared for the benefit of the organization (Sangeeta, 2015: 167).

1.1.4 Explicit Knowledge

Explicit knowledge is knowledge that is easy to express and communicate (Roy, 2015: 21). It is codified and stored in databases and is formulated in sentences, captured in drawings and writings, thus, easily transferable (Daland, 2016: 31). Therefore, it can easily be shared and communicated and is available to all those who need it. It is stored in books, reports, standards and other physical and electronic formats. Explicit knowledge is also known as declarative knowledge which is in the form of rules, policies, specifications and formulae (Kumar, 2010: 25).

Explicit knowledge is documented knowledge which can be used in decision making. It is expressed in formal language, published and made available in primary and secondary sources of information (Sangeeta, 2015: 166).

1.1.5 Knowledge Management

Knowledge Management is the process of creating, storing, sharing, applying and re-using organizational knowledge from different disciplines through sound practices to enable an organization to achieve its goals and objectives (Hussain and Nazim 2015: 711). For the purpose of this research, KM can be defined as the process of creating, acquiring, sharing, and applying both tacit and explicit knowledge for the benefit of the university library and the entire user community through the provision of the right information to the right user in the right format and at the right time in order to accomplish the institution's goals and objectives (Jain and Joseph, 2013: 2).

Additionally, Knowledge Management is the art of creating value from an institution's knowledge assets. It is a set of processes that govern the creation, sharing and application of knowledge (Sinha, 2014: 123-124). KM is a process of transforming knowledge assets into value and it is the key to generating breakthrough ideas. By practicing KM, organizations are able to generate value-based services and products. This is achieved through enabling individuals in an organization to collectively acquire and share knowledge (Sangeeta, 2015: 168).

1.2 Context of the Study

The context of this study is a single case which investigated the implementation of KM as a tool for sustainable competitive advantage in university libraries and the attendant benefits basing its findings on the University of Nairobi Library. University of Nairobi library provides resources and information services which support teaching, learning and research to the university community (University of Nairobi, 2015: 1043). The library has subject-based branch libraries in six colleges, institutes and schools. There are two satellite campuses in Kisumu and Mombasa with well stocked libraries. Several extra-mural centres across the country have libraries that support the information needs of the lecturers and students in those centres. The main library is known as Jomo Kenyatta Memorial Library.

1.3 Statement of the Problem

A good number of people are starting to appreciate the importance of university education for socio-economic and political development. This change of lifestyle has given rise to the influx of those seeking enrollment in universities to pursue higher education. The growth witnessed in these institutions has affected the units that support higher education, like libraries. This has been exacerbated further by the need for the libraries to offer enhanced quality services which adequately address the challenges the fast changing knowledge environment faces. However, this phenomenon can be addressed effectively through the creation, sharing and retention of the critical knowledge in the library and information service. The process through which new knowledge is created is through seminars, workshops, conferences and work experience which should be promoted. But more often than not, the library members of staff who get the opportunity to attend these forums do not share the knowledge they acquire. When they leave the organization, their knowledge goes with them. Lack of incentive regimes have largely been attributed to this phenomenon among others.

Despite the growth that has been witnessed, libraries continue to suffer budget constraints (Rajurkar, 2011: 5). It is prudent, therefore, to commit the limited budgets allocated to university libraries into the services which enhance efficiency and effectiveness. Most often, the resources used to build capacity is lost when the knowledge gained is not applied properly, shared and retained in the organization. This is largely due to lack of policies and procedures that guide knowledge creation, sharing and retention. Institutions practicing KM

have a lot to offer in value-added services to the clientele and this is not in doubt. However, accessibility to knowledge is still difficult because most of it resides with individuals. What is most worrying is management's failure to map out critical knowledge within the individual employees for sharing and retention before they leave the institution.

The conventional role of LIS professionals is to gather, organize and disseminate information resources in print and non-print formats to information seekers. With the emerging complexities in executing this role, they must embrace relevant and effective Knowledge Management strategies to remain ahead of competition. The challenge faced by the University of Nairobi Library is the ability to retain critical knowledge embedded in the individual employee's mind due to poor knowledge sharing culture among staff. Lack of clearly defined guidelines on KM implementation, inadequate or lack of KM training for staff and the requisite budget are the other challenges affecting KM implementation in the library. Therefore, failure to access and use employees' tacit knowledge hampers the creation of new knowledge for growth and innovation. This fact has not been embraced at the UON Library, hence, the failure to provide pinpointed and critical *Selective Dissemination of Information* and *Current Awareness Services* to the library clientele. The study was therefore, conducted in order to give suggestions from the findings and breakthrough solutions for the implementation of KM. These findings will also lead to enhancement of library services and visibility of the parent organization globally. This study sought to identify the role implementation of KM practices play to attain a sustainable competitive advantage for university libraries as is practiced at the University of Nairobi Library.

1.4 Aim of the Study

The aim of the study was to investigate the implementation of Knowledge Management practices as a tool for sustainable competitive advantage at the University of Nairobi Library.

1.4.1 Objectives of Study

The specific objectives enumerated below were used to guide this study:
1. To determine the extent to which Knowledge Management is practiced at the University of Nairobi Library
2. To determine which Knowledge Management strategies can generate sustainable competitive advantage at the University of Nairobi Library

3. To evaluate the effectiveness of Knowledge Management as a source of sustainable competitive advantage at the University of Nairobi Library

4. To identify the challenges encountered in implementing Knowledge Management strategies for sustainable competitive advantage at the University of Nairobi Library.

1.4.2 Research Questions

The research sought to provide answers to the following questions:

1. What is the extent to which Knowledge Management is applied at the University of Nairobi Library?

2. What Knowledge Management strategies has the University of Nairobi Library deployed to achieve sustainable competitive advantage?

3. How effective is Knowledge Management implementation enhancing sustainable competitive advantage at the University of Nairobi Library?

4. What are the challenges being experienced during the implementation of Knowledge Management to generate sustainable competitive advantage at the University of Nairobi Library?

1.5 Significance of the Study

Knowledge is a crucial source of value creation in an organization. Once organized and applied accordingly, the organization is able to achieve success and economy in service provision to the clients. This study sought to demonstrate that university libraries with successfully implemented KM practices can withstand the competitive industry of information service. University libraries practicing Knowledge Management understand the information needs of their users better than those that do not. Through a user satisfaction survey, this study would help the University of Nairobi Library management to identify and address the inadequacies that abound in their service delivery endeavours using appropriate solutions. The study findings will inform the formulation of strategic policies which support KM practices in the University of Nairobi library to achieve competitive edge. The findings of the study will also help to provide an understanding of the strategic role Knowledge Management can play at the University of Nairobi Library. Most importantly, the study has tried to demonstrate how leveraging Knowledge Management in university libraries is key in achieving efficiency under strained budget allocation. This study will also contribute

scholarly literature on the potential of Knowledge Management for university libraries and provide avenues for further research.

1.6 Assumptions of the Study

Assumptions are statements that are taken for granted or are considered true, even though they have not been scientifically tested. They are principles that are accepted as being true based on logic but without scientific proof or verification. The study made the following research assumptions:

1. There is lack of information about the adoption of KM strategies for effective and efficient information services in university libraries.
2. LIS professionals lack the awareness of the benefits of practicing KM for enhanced service delivery.

1.7 Scope of the Study

The focus of the research study was on the implementation of Knowledge Management as a tool for sustainable competitive advantage at the University of Nairobi Library. University of Nairobi is based at the Nairobi County, Kenya. It has two branches in Mombasa and Kisumu with well stocked libraries. The study was carried out at the Nairobi branches only because they bear the bulk of resources which would provide the requisite information for this study. Out of the university's twelve branch libraries, six of them provided the research sample from the users who comprised postgraduate students and academic members of staff. Library staff in the department who were critical bearers of the information required for this study were also sampled.

1.8 Limitations of the Study

Limitations of the study refer to restrictions on a study which may compromise or reduce the validity of the research findings. Additionally, the researcher has no control over these restrictions. This study was conducted at the University of Nairobi Library. The following limitations were experienced during the study: access to resources which included expertise and specialized services, approval by authorities to conduct research, the users who came to the library during the period of the research, some users were on recess, ethical and researcher skills. Non-return of questionnaires by some respondents also limited the researcher's capacity in this study.

1.8 Operational Terms and Concepts

Competitive advantage: this is the way in which organizations apply skills and innovations or resources to attain superior return on investment (de Haan, 2015: 46).

Explicit knowledge: this is knowledge which is expressed in numbers or words. It is documented or stored in databases. It is in print and non-print format. It is tangible knowledge.

Infobesity: it is also known as information overload. This is a term used to describe a condition where there is too much information about an issue thereby making it difficult to put it into meaningful use.

Infoglut: is also known as Information glut. This is masses of continuously increasing information, so poorly organized or unorganized at all, therefore, it is difficult to navigate through them to search or draw any conclusion or meaning.

Innovative strategies: this is a plan of action put in place by a firm to achieve competitive edge through innovation and providing value-added products and services.

KnowHow: this is expert skill, mastery of, ingenuity, aptitude, practical knowledge, understanding, and proficiency to accomplish a task. It is practical knowledge and ability to do something correctly.

Knowledge Management Practice: this is what people do to manage tacit and explicit knowledge. It is accomplished at individual and organizational level.

Knowledge Management Strategy: this is a framework developed by an organization to address high-level goals through the identification of its critical knowledge needs and providing a mechanism to accomplish them.

Knowledge management: this is the process of creating, acquiring, packaging for application and re-use of knowledge. It is a process used by organizations to create enhanced value based on individual or organizational knowledge (Sangeeta, 2015: 168).

Sustainable competitive advantage: this is a level of achievement when a firm receives return on investment which is greater than the norm and this goes on for a period long enough to change the nature of the industrial competition or the strength of the organization despite competition dynamics in the market.

Tacit knowledge: also known as implicit knowledge is the subjective and experience based knowledge which is difficult to transmit and share. It is not expressed in numbers or words. It is intangible knowledge.

University libraries: also known as **academic libraries** are information centres established to support the vision and mission of the parent institutions which include learning, teaching and research to equip members with the knowledge required to serve society and advance the welfare of the human race (Aswath and Gupta, 2009: 181).

1.10 Chapter Summary

The chapter lays the foundation upon which the research process is based. It introduces the research problem and provides the background of the study. Additionally, the main concepts of Knowledge and Knowledge Management are discussed. The research questions that guide the study undertaking have been indicated. Also discussed is the importance of the research study and operational terms have been identified and explained.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is intended to provide a firm and sound basis for understanding Knowledge Management strategies, how they contribute towards improving organizational effectiveness and generate sustainable competitive advantage for university libraries. Through the review of relevant KM literature, this research sought to find out whether LIS professionals usually put to use both tacit and explicit knowledge to gain sustainable competitive advantage. Themes discussed include: changing role of university libraries, Knowledge Management in the context of LIS, competencies of LIS professionals in KM, service quality, user expectation and perception of library services, use of technology in KM and the challenges that affect KM implementation in university libraries.

2.1 The Changing Role of University Libraries

Libraries are established to meet different user needs. But all this notwithstanding, the responsibility of the LIS professionals is to collect relevant information materials using a criteria established by the parent institution to fulfill its goals and objectives. The policies to be used affect the various conventional library services such as selection, acquisition and preparation of information materials for use by both students and staff.

Universities all over the world are experiencing tremendous change which has been occasioned by the current knowledge economy. This has a direct bearing in the way their libraries operate. According to Jain and Joseph (2013: 1) libraries are central in managing the knowledge of their parent institutions. This means that libraries that are stuck to their conventional functions may not be in a position to support the vision and mission of their parent institutions.

Libraries being service oriented entities, their main objective is to provide the right information to the right user at the right time and in the right format (Jain, 2013: 2). They are learning and knowledge centres which exist to support the faculty and student population to cope with the exponential growth in human knowledge. This growth has led to the struggle for attention among universities globally. The attention is tied to scholarly recognition and

research funding which is not easy to come by. University libraries therefore, endeavour to improve on KM practice in every key area of their services for sustainable competitive advantage. This includes developing their own resources, providing the means of access and sharing strategies (Kumar, 2010: 26).

Today, members of the faculty and students expect enhanced access and support to information for teaching, learning and research. This is because the resultant output is what fuels innovation which industry yearns for so much. LIS professionals therefore, need to embrace KM practices which will avail the necessary environment to generate innovation. According to Daland (2016: 31-34) these practices include: strategies for knowledge transfer; learning in professional life; learning on demand; managing knowledge; and embracing knowledge management systems.

Customers are paramount in the success of any business and things are not any different in the world of academia. Regular use of a firmøs products and services attests a satisfied customer. This relates closely to innovations which form the source of sustainable competitive advantage for industries and it tends to guide funding of universities to a large extent. Universities are aware of the economic potential of their research efforts (Jain, 2013: 1) and libraries being research centres are embracing KM practices to enhance their traditional functions (Roy, 2015: 22).

The aim of practising KM in university libraries is to improve services, leverage existing knowledge and produce more with less (Jain and Joseph, 2013: 1). Virtualization and internationalization are some of the external forces that have led to the new ways in which university libraries function. Jain has also attributed the changing role of university libraries to the evolution being experienced in education system, introduction of the ICTs, the ever changing user needs, information and knowledge explosion, social media and changes in scholarly communication.

The ever changing usersø information seeking behaviour, freedom of access to information and demand for quality services are some of the issues university libraries have to contend with. The same applies to the ever increasing usersø expectation which is a factor that has led to employing innovative strategies for sustainable competitive advantage.

2.2 Knowledge Management in the context of Library and Information Service

Knowledge management was first started and popularized in the business sphere in the 20th Century (Rajurkar, 2011: 5). In the new era of the knowledge economy, possessing sustained, relevant and strategic knowledge enables institutions to gain sustainable competitive advantage. Knowledge is gained through observation, learning and experience (Rajurkar, 2011: 5). It determines the kind of relationship that will exist between the holder of the õKnow-Howö and the information or service seeker.

University libraries experience exponential increase of data and information in unprecedented proportions. The environment in which these institutions operate in keeps on changing and consequently, the need to respond accordingly to the information needs of the academic community by practicing Knowledge Management (de Bem, de Souza & Coelho, 2013: 80). LIS professionals therefore, need to use their conventional skills to capture, organize and store knowledge for ease of access and re-use to avoid õinfobesityö among users. This is because Knowledge Management practice in university libraries has profound effects on performance just like in the business world (Ohiorenoya and Eboreime, 2014: 402).

Some major drivers of KM in university libraries have been identified by researchers and they include; factor of survival to meet user information seeking behaviour and overcome competition, enhanced visibility of university libraries, university libraries as knowledge creating and knowledge-based institutions, increased value of knowledge in the knowledge economy, the need to improve services for user satisfaction, and to overcome budget constraints (Jain, 2012: 140-142).

Strategies to capture grey, traditional and institutional knowledge by initiating open access policy have enhanced visibility, re-use and generation of new knowledge among the academia (Sangeeta, 2015: 163). The author further opines that the creation of new knowledge fuels innovation. Innovation and creativity are the key ingredients to obtaining highest advantage. This is crucial for a university library as the centre for scholarly communication.

The first KM process in university libraries is knowledge creation (Rusuli, et al, 2013: 154). This, according to the same writer, can be achieved through the understanding of the information needs of the users and the institution¢s carriculum. Knowledge creation spirals from the individual to intra and inter organizational dimensions. LIS professionals, faculty members and ICT experts should therefore, work together towards realizing the institution¢s set goals and objectives. Most importantly, LIS professionals need to acquire and update their knowledge and skills constantly to remain afloat in today¢s university libraries environment (Roy, 2015: 22).

As learning and knowledge organizations, university libraries should endeavour to explore and rethink the means and ways in which their services can be enhanced so that their parent organizations can become market leaders in teaching, research and service to humanity (Sinha, 2014: 123). This can be achieved through the creation, discovery, capture and sharing of tacit knowledge and codifying it into explicit knowledge (Rusuli, 2013: 155). The approach to this process is twofold; firstly, the individual knowledge is converted into corporate knowledge and secondly, the creation of an organizational culture that promotes knowledge sharing. It is through knowledge sharing that new knowledge is created and the highest competitive advantage is obtained (Ohiorenoya and Eboreime, 2014: 403).

Sustainable competitive advantage among university libraries is not measured by the profit margin accrued in a given period of time but how visible an institution becomes and the level of accessibility of its information resources internationally. Many reasons for practicing KM in university libraries towards achieving this have been advanced, chief among them being; to improve the university libraries services and productivity, to produce more with less fiscal and human resources, to leverage the existing knowledge, to manage information and knowledge explosion, to manage rapid knowledge decay, to make informed decisions, to establish best practices and to reduce or eliminate duplication of effort (Jain, 2012: 146-148).

According to Motaghi-Far (2012: 1473-1475), there are five possible ways in which university libraries can apply knowledge and add value for parent institutions. These are: turning conventional libraries into electronic ones; empowering LIS professionals to cope with this change; upgrading the status of libraries and LIS professionals in the university; development of informed users; and contributing to the creation of independent users and critical thinkers. Some of the common KM practices in university libraries include: adoption

of web 2.0 technologies and social media; use of virtual and online reference services; digitization of library collection; and institutional repositories (Jain, 2013: 4-5).

2.3 Competencies of Library and Information Service professionals in KM

For LIS professionals to be effective in the field of KM, they must acquire additional competencies to develop innovative ideas for capturing, processing and sharing knowledge. This is the same reason a range of interpersonal and business skills are finding their way into the LIS environment. According to Nazim and Mukherjee (2013: 376), managerial, leadership and interpersonal skills are among the skills required to foster innovation in organizations.

The traditional skills of LIS professionals are still useful, though they require to be upgraded to deal with digital formats and internet resources. Quoting Teng and Hawamdeh, Nazim and Mukherjee (2013: 377) posit that some of the crucial skills needed for successful implementation of KM in an organization can be categorized into four; namely: IT literacy; innovation and inquiring; sharp and analytical mind; knowledge creation, flow and communication.

The conventional role of LIS professionals has been to collect, process, disseminate, store and use information to provide services for personal and professional needs to library users (Rajurkar, 2011: 3). Due to the transformation that has been witnessed in University libraries where knowledge management is increasingly being embraced, LIS professionalsø role has changed and so have their competencies and skills. The findings of many studies on the competencies for successful KM initiatives have identified the following as skills required by LIS professionals: interpersonal communication, leadership, strategic and restructuring skills, networking, consensus building and teamwork. To this list of competencies Rajurkar, (2011: 3-4) adds the following; knowledge of the library resources and their location, knowledge of the users and their sources of information, knowledge of the ICTs, understanding of the knowledge creation process and a sharp and analytical mind.

The success of university libraries depends on the aforementioned skills and competencies of the staff. Managing the skills and õKnow-Howö employees acquire through years of experience is a great challenge. According to Balague, Duren & Saarti (2015: 338) an annual training programme can be designed and implemented, taking into consideration the review

of previous training and the requirements for meeting changes prevailing in the entire operational and tactical environment.

It is evident that to meet the needs of users through the traditional avenues of information service in university libraries is no longer tenable. LIS professionals should, therefore, be able to map out internal and external knowledge that can assist to increase efficiency and effectiveness (Sinha, 2014: 12, 125). The author further suggests that LIS professionals being experts in capturing and transferring knowledge, the skills and competencies that have been enumerated above will be instrumental in the following; managing knowledge as an asset, representing knowledge in documents and databases, sharing knowledge without any geographical limitations and generating new knowledge. Creating new knowledge is achieved by adding value to information through such processes as filtering, summarizing and repackaging. This way, an institution will be able to gain a competitive edge.

2.4 Service Quality, User Expectation and Perception of Library Services

University libraries are learning institutions which stimulate academic and research activities through the provision of access to information resources (Hossain & Islam, 2012: 169). By so doing, they strive to meet and satisfy information needs of the users. This enhances profitability, improves productivity and generates competitive edge for them. The quality of the traditional academic library is measured by its infrastructural and collection size, and usage. However, the tremendous technological transformation they have undergone has rendered the traditional operations obsolete (Masrek & Gaskin, 2016: 37). The adoption of web 2.0 technologies by university libraries has improved the relationship between librarians and users (Ahenkorah, 2016: 551). This allows users to participate in library services thus, improving the understanding librarians have of the users.

The approach to information seeking and demand for quality services by the users has made university libraries to put in place systems conducive for their operations. This includes the provision of valid, relevant and user-driven information resources (Nzivo, 2012: 110). The timeliness with which information is accessed and retrieved is a major concern to both the librarian and the user. The existence of search engines which provide friendly interface to information in real time offer the much deserved solution. Additionally, university libraries have come up with websites which are gateways to electronic information content and other electronic services (Kaur & Singh, 2011: 738). OPACs, for instance, are revolutionary

facilities which libraries have provided to enable users to locate relevant documents through advanced, boolean, keyword, and truncation search capabilities (Kumar & Vohra, 2013: 37).

When the librarians know the information needs of their users, it becomes possible to make accurate and timely decisions with fewer resources (Mehrjerdi, 2017: 374). The author further opines that university libraries worldwide are charged with better management of resources and the improved services they offer to their users and determining how they enhance performance level of their parent organization (Mehrjerdi, 2017: 375). It is through identification of specific problems in library services and how they are resolved that will generate a good relationship between libraries and users (Zhai, 2016: 598).

2.5 Technology in Knowledge Management

Successful KM implementation in university libraries requires many high end technologies as enablers. Technology is usually deployed in university libraries to actualize effective and efficient use of õKnow-Howö and intellectual capital in knowledge discovery, capture, organization, storage, sharing and re-use. Further, it facilitates knowledge integration globally through the transfer of explicit knowledge. It is widely acknowledged that technology has made significant change in the conventional library systems through enhanced ICT infrastructure such as search engines, internet, intranet, extranet, repositories, portals, websites, knowledge bases, gateways, web 2.0 technologies, data warehousing, data mining, text mining, and many more (Kumar, 2010: 27). Therefore, it has enlarged the scope and speed of knowledge acquisition and transfer at reduced cost.

With the introduction of web 2.0 technologies, university libraries have transformed the ways in which they interact with the users. Users no longer should be physically present to access library services but can do so virtually with the help of the internet. LIS professionals can use 2.0 applications like wikis, twitter, blogs and other similar knowledge creating tools to disseminate and exchange knowledge (Jain, 2013: 4). Web 2.0 technologies empower users to use and share the right content in a timely and efficient manner. The application of social media helps LIS professionals to understand the needs of the users and they are able to provide appropriate and prompt feedback (Nazim and Mukherjee: 2013: 20).

Digitization of university library collection has been trending in recent years due to its benefits of resource preservation, sharing and re-use. Digitized information resources with

internet connectivity allow hypertext linking to related fulltext literature (Jain, 2013: 4-5). Many university libraries have set up Institutional Repositories (IR) to manage their parent institutionsø knowledge assets. IRs are KM tools that have majored in archiving and preserving for posterity an institutionøs scholarly knowledge and enhancing its communication worldwide.

2.6 Factors Leading to KM Implementation Failure in University Libraries

Knowledge management has been identified as a useful tool for value added service delivery in university libraries. This fact has been qualified by de Bem (2013: 86), Poonkothai, (2016: 12-13) and Jain, (2012: 146-148), who argue that the main reason for the adoption of KM in university libraries is to: improve library services by ensuring staff efficiency, producing more with less thus increasing revenue, leveraging already existing knowledge to improve library performance, managing information explosion, managing rapid knowledge decay, making informed decision for improved services, establishing best practices and avoiding duplication of effort to guarantee a position in the knowledge market. Further, Mostofa and Mezbah-ul-Islam (2015: 51) opine that knowledge sharing, information technology, community of practice, professional education and training are some of the most important KM tools in University libraries.

However, the factors enumerated above being the reason for the implementation of KM practice in libraries remain unmet most of the time because of various factors. A study by Jain (2012: 142) identifies insufficient budget, lack of knowledge sharing culture, lack of a centralized KM policy, misunderstanding of KM concept, lack of collaboration, lack of the requisite technology and techniques, lack of clearly defined guidelines on KM implementation, lack of incentives and inadequate staff training to be some of the impediments towards successful KM implementation.

The challenges mentioned in the preceding paragraph are symptomatic of the difficulties faced in the implementation of KM initiatives in university libraries. There is also the challenge of converting individual knowledge into organizational knowledge (Mavodza and Ngulube, 2011: 15). This is as a result of the õknow-howö bearer reluctance to share knowledge. Organizational knowledge is the knowledge for all the employees in an organization which is a spiral of tacit and explicit knowledge (Daland, 2016: 30). This knowledge should be freely accessible by all the employees. Sharing of knowledge in an

organization is depended upon the shift between tacit and explicit knowledge. This shift is instrumental in the creation of new knowledge for innovation. Therefore, pertinent KM strategies for a library to use are dependent upon the vision, mission and core values it endeavours to champion for value added services. However, poor or failure to embrace change management as Jain (2012: 143) explains has frustrated KM implementation effort in many university libraries.

Knowledge Management practice in university libraries at times face reservations or resistance from among LIS practitioners. According to findings of a research done by Balague, Duren and Saarti (2016: 188-189) at the University of Stuttgart library, they reported that though, the culture of pursuing quality service delivery and continuous improvement is deeply rooted, unwillingness to deploy social media for sharing knowledge. Resistance to learn to use new technology was observed in the same study. Resistance to embrace KM practice by LIS practitioners has also been cited by Jain (2012: 142) because of their traditional mindset. In the case of University of Stuttgart library, resistance to use of technology in sharing knowledge was out of the fear surrounding the issue personal information

2.7 Theoretical Framework

A theory is a set of concepts and principles which have been organized in a manner intended to explain a certain phenomena (The Research Council of Norway, 2012: 3). Further, it explains the *how* and *why* something functions the way it does. A theory provides explanations, guidelines and predictions for actions and behaviour. A theory is formulated to explain, predict and understand a phenomenon. A theoretical framework is therefore, a structure that supports a theory of a research study. It introduces and describes the theory that explains the reason for the existence of the research problem.

2.7.1 Resource-Based Theory

Resource-Based Theory first emerged in the 1980s and 1990s through the works of Wenerfelt (1984), Prahalad and Hamel (1990), Barney (1991) and other scholars who held the view that institutions should look internally for sources of competitive advantage instead of the external environment. These scholars argued that it is more feasible to exploit the external opportunities using existing resources in a new way instead of acquiring new skills for every new opportunity. This theory provides an important framework for understanding and

anticipating the basis of an institution's sustainable competitive advantage and performance (Kozlenkova, Samaha and Palmatier, 2014: 1).

Resource-based theory identifies two resources which help institutions to achieve improved organizational performance. The strategic resources which provide an institution with the all important opportunity for developing sustainable competitive advantage over the rivals comprise of tangible and intangible assets (Clark and Barney, 2007: 128). Tangible assets consist of physical things like buildings, machinery, equipment and many more. Intangible assets have a non-physical presence. They include brand reputation, trademarks, intellectual property, processes, knowledge embedded in the minds of the workers and many more. Intangible resources are immobile in nature and normally stay within an institution. Institutions attain sustainable competitive advantage because of deploying different bundles of resources which are valuable, rare, costly to imitate and non-substitutable (Barney and Clark, 2007: 128).

Competitive advantage is based on harnessing and exploiting core competencies of the employees of an institution. Some of these competencies, according to Halawi, Aronson and McCarthy (2005: 75) are rare, valuable, imperfectly imitable and non-substitutable. They can only be associated with the aforementioned intangible resources which are borne by the employees. This is the knowledge that stimulates competition among businesses, university libraries and other sectors, hence, the adoption of Resource-Based Theory to guide this research. This is supported by renowned KM theorists Nonaka and Takeuchi who posit that:

> *"In a strict sense, knowledge is created only by individuals... Organizational knowledge creation, therefore, should be understood as a process that 'organizationally' amplifies the knowledge created by individuals and crystallizes it as a part of the knowledge network of the organization"* (Nonaka & Takeuchi, 1995:59).

The competencies of the employees are valuable enabler and measure for organizational competencies. The focus on the resources an institution has and the willingness to position these as breakthrough organizational assets will catapult competitiveness to unparalleled levels.

2.8 Conceptual Framework

A conceptual framework can be defined as a set of interconnected ideas or theories about how a particular phenomenon functions or is related to its parts. It serves as the basis for understanding the causal or correlational patterns of interconnections across events, observations, ideas, concepts, interpretations, knowledge and other components of experience (Neuman, 2014: 201). Further, every person has a conceptual framework about how reality works that precipitates predictions about how concepts are related and what happens when they intersect.

Fig. 2.1 is the model which guided this research to demonstrate the progression link to sustainable competitive advantage. This model provided a framework which guided the research. The researcher endeavoured to demonstrate how increased and sustained focus on these themes is paramount in enhancing value added services and products delivery to the users. This research explored the link which exists between Knowledge Management and Organizational Effectiveness which ultimately gives rise to sustainable competitive advantage.

The study used this conceptual framework to identify and indicate various aspects which influence sustainable competitive advantage in university libraries. The dependent variables of knowledge creation, sharing and retention are the outcome of an enabling organizational culture, infrastructure and strategy. Additionally, adopting pertinent mentoring systems through community of practice, incentive schemes, continuing education or learning, groupware, discussion forums, appropriate technology infrastructure and collaboration among others will lead to efficiency and effectiveness in information service delivery. Growth and innovation will be realized in university libraries and continued practice of these virtues will sustain the competitive edge for them.

2.8.1 Organizational Culture

Culture is the values and beliefs of a group or community of people which define the way they work, resolve issues, interrelate, and communicate. Culture is created and ingrained into people's life unconsciously (Ashkanasy, Wilderom and Peterson, 2011: 14). Further, organizational culture is the manner in which organizations solve problems to achieve specific objectives. It can be described as manifest of pattern of behavior. A conducive

organizational culture for the realization of the dependent variables should be cultivated within an organization to attain competitive edge (Balague, Duren and Saarti, 2016: 192).

2.8.2 Organizational Strategy

Organizational strategy is the expression of how an organization intends to evolve over time to meet its goals and objectives. It is the sum total of the actions organizations deploy to achieve short and long term goals. When these activities are put together they form an institution's strategic plan. Every activity seeks to achieve a specific objective. To develop an elaborate organizational structure, a needs assessment should be conducted so that the immediate and future desired changes can be determined and addressed. Organizational strategies enable institutions to achieve long term goals and continuous success in business outcomes (Bindu, 2011: 514).

2.8.3 Knowledge Creation

Through the use of information, new knowledge is created. The effective use of the existing knowledge is an important process for knowledge creation. The creation of new knowledge is a continuous process of transfer, combination and conversion of tacit and explicit knowledge as people learn and interact. Knowledge creation is central to the individuals which through sharing transcends into organizational knowledge (Lindner and Wald, 2010:2). The creation of new knowledge is demonstrated through *Socialization*, *Externalization*, *Combination* and *Internalization* (SECI) model developed by Nonaka and Takeuchi (1995). Individual knowledge is gained through learning, sharing, observation and experience. This knowledge is tacit and difficult to share. Through the process of *socialization*, knowledge is created through observation, guidance, imitation, and practice. The other process of knowledge conversion is *externalization* where tacit knowledge is codified into manuals, and other tangible formats for easy access. Use of metaphors is one of the means to convert tacit into explicit knowledge. *Combination* is the simplest of the four phases of knowledge conversion. It is the process of integrating different types of explicit knowledge collected from outside or inside the organization to form new knowledge for use. *Internalization* takes place when explicit knowledge is converted into tacit knowledge. The knowledge acquired from the explicit sources is internalized thus generating new knowledge. This new knowledge is tacit in nature. The process of knowledge conversion is a spiraling process of interactions between tacit and explicit knowledge.

2.8.4 Knowledge Sharing

The process through which information is exchanged among people is known as knowledge sharing. Knowledge sharing is a Knowledge Management tool which relies on the willingness of the knowledge worker to seek out or be receptive of the knowledge. Some of the factors that support knowledge sharing are incentives, trust and the right culture. For explicit knowledge, information technology can be used to share knowledge among people and institutions dispersed over a wide area. Sharing tacit knowledge is mostly people-based through socialization (Visvalingam and Manjit, 2011: 466).

2.8.5 Knowledge Retention

This is the capture of information in an organization for later use. Knowledge in an organization is retained in individuals, culture, processes, networks and repositories among others. To avoid loss of critical organizational knowledge, a retention strategy should be put in place. This will help in identifying knowledge resources that suffer the risk of loss and must be retained. Specific initiatives to retain this knowledge should therefore, be identified and applied. Chief among them being rewards regime, mentoring programmes, after-action reviews and exit interview (Moria, 2011: 582-593).

The independent and dependent variables are mutually interdependent. They require management support to facilitate the intervening actions to achieve the outcomes as envisaged in the conceptual framework.
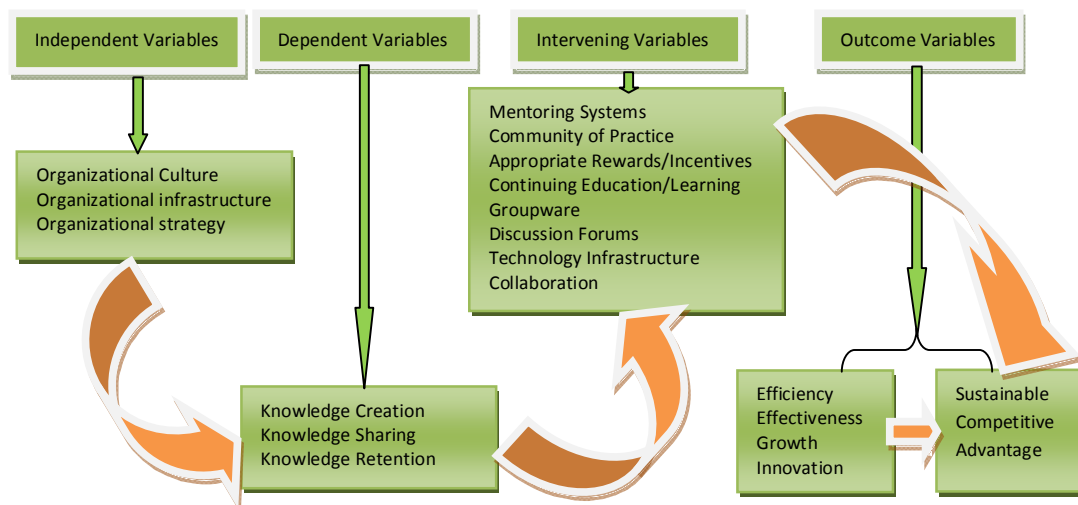
Fig. 2.1 Knowledge Management Conceptual Framework (Source: Researcher, 2017).

2.9 Chapter Summary

This chapter reviews the literature by scholars that is relevant to the topic of this research study. Further, detailed information is provided in line with the objectives and research questions of the study. Additionally, the chapter demonstrates the need to embrace Knowledge Management for value-added information service in the face of unpredictable information seeking behavior among university library users. Predictably, this is the sure way to ward off competition and sustain a lead in the same market industry.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter deals with the description of the methods that were used to carry out the research study (Ngechu, 2010: 36). It provides a systematic approach to solve the research problem (Kothari, 2014: 7) and is organized under the following parts: research design; area of study; target population; sample and sampling techniques; data collection methods; data collection procedures; data analysis and ethical considerations.

3.1 Research Design

Research design serves to guide research in the process of collecting, analyzing and interpreting observations. It is a logical model of proof that allows the researcher to draw inferences concerning causal relationships among variables under investigation (Yin, 2013: 21). Similarly, it is a work plan intended to guide the research towards addressing the research questions. This enables a research to be efficient enough to yield maximum information (Kothari, 2014: 12). This study is about the implementation of KM strategies in a university library with the objective of generating sustainable competitive advantage and has adopted the descriptive type of research. The collected data were analyzed through qualitative and quantitative or mixed method. This was the most appropriate research design for this study because of its complementary benefits. According to Creswell (2014: 4) qualitative approach, executed through the interview method enables the researcher to explore and understand the meaning respondents attach to social problems whereas quantitative approach is used to test the objectives of the research by examining the relationship among variables through questionnaire. The application of both methods provide a better understanding of a research problem than either alone. Consequently, this enables the researcher to examine the level of awareness, attainment of objectives, cost-effectiveness, and quality assurance as a sure means to competitiveness (Walliman, 2011: 12).

3.2 Area of Study

According to Ngechu (2010: 36), the area of study defines the limit of the study area or problem. It includes: a map of the geographical coverage and area in hectares, climate in temperatures and rainfall, vegetation, transport structures, socio-economic and demographic

description. This study is about the implementation of KM practices as a means of generating sustainable competitive advantage for the University of Nairobi Library. It has therefore, been confined to the same library. The research study was focused on five branch libraries out of the twelve located within Nairobi. These libraries bear the bulk of resources at the institution and provided the requisite information for the study.

3.3 Target Population

According to Walliman (2011: 365), target population is a concept used to describe the total number of cases which is the subject of study. It is a collection of interest in research which may include events, people, and objects (Maina, 2012: 9). A population of 863 comprising 823 users and 40 library staff was targeted in this study (University of Nairobi Student Nominal Roll, 2017 and UON Library Staff Register, 2017). The user population from five branches of the UON Library where the sample was selected from is indicated in Table 3.1. The population comprised 157 Postgraduate students and 104 Academic members of staff from the College of Agriculture and Veterinary Sciences (CAVS), 48 Postgraduate students and 10 Academic members of staff from Population Studies and Research Institute (PSRI), 55 Postgraduate students and 17 Academic members of staff from Institute of Anthropology, Gender and African Studies (IAGAS), 40 Postgraduate students and 10 Academic members of staff from Institute of Development Studies (IDS), and 320 Postgraduate students and 62 Academic members of staff from School of Law (SOL).

A total of 40 library staff was targeted in this study as shown in Table 3.2. They were selected from 107 members of staff in all branches of the UON library. They were selected using purposive sampling technique and they included 3 Top level managers comprising the Director and two Deputy Directors, 9 Senior Librarians, 13 Librarians and 15 Senior Library Assistants. The target population of LIS professionals bears the critical data required for the research because they are involved directly in the acquisition, preservation and dissemination of information to the user community. According to Walliman (2011: 188) purposive sampling involves selecting a sample that will provide reliable information for the study, hence, the researcherøs choice of this category of LIS professionals from UON Library as the population in the research.

Table 3.1 Library Users.

STRATA	POSTGRADUATE STUDENTS	ACADEMIC STAFF	TOTAL
CAVS	157	104	261
PSRI	48	10	58
IAGAS	55	17	72
IDS	40	10	50
SOL	320	62	382
SUB-TOTAL	620	203	823
TOTAL			**823**

Table 3.2 Library Staff

Position	No. Of Staff	Target Population
Director	1	1
Deputy Director	2	2
Senior Librarian	9	9
Librarian	14	14
Senior Library Assistant	14	14
Library Assistant	65	0
Library Attendant	3	0
Total	**107**	**40**

3.4 Sample and Sampling Techniques

This section explains how the sample size for this study was picked using Yamane Taro formula for sample calculation from the target population. The sampling procedure is also discussed.

3.4.1 Sample Size

According to Baran and Jones (2016: 108), a sample is a group of people, a set of objects or items which are picked from a population for measurement. The research sample that is selected should be representative of the population for the findings from it to be generalized to the whole population. Sample size is the number of sample units being measured in a study. Its size determines the precision of the study findings. Therefore, large sample sizes improve precision because a large portion of the population is being measured. This study

comprised a sample size of 118 respondents. It was drawn from an accessible population of 863 composed of 823 library users and 40 University of Nairobi Library staff. The sample size was selected using Taro Yamane formula (Yamane, 1973) for calculating sample size as shown in Table 3.3.

$$n = {}^{N}/_{1+N(e)^2}$$

Where: n= the sample size, N= the population size and e= 10% marginal error.

$$n = {}^{823}/_{1+823(0.1)^2}$$

$$n = 89$$

Table 3. 3 Sample Size

Respondents	Population Size	Sample Size	Sample Ratio
Library Users	823	89	11%
Library Staff	40	29	72.5%
Total	**863**	**118**	**83.5%**

(Source: University of Nairobi Student Nominal Roll 2016-2017 and Library Staff Register)

3.4.2 Sampling Technique

Sampling technique has been defined as the act, procedure, or technique used to select a sample or portion of a population for the purpose of studying and understanding the entire population's characteristics (Baran and Jones, 2016: 108). Sampling techniques can either be probability or non-probability.

This research study adopted stratified random sampling technique to select five College, Institute and School libraries at the University of Nairobi. In order to achieve a simple randomized sample from the different strata in the population, an equal size randomized sample was obtained from each stratum separately to ensure equal representation. The sample was then combined to form a complete sample for the whole population (Walliman, 2011: 185-186). The first five libraries in terms of library user population in an ascending order were selected for this study. Stratified random sampling was used to select postgraduate

students and faculty members who are users of the five branch libraries. This technique was best suited for the selection because it facilitates the division of a population into homogeneous subgroups and a simple random sample is taken in each group (Neuman, 2014: 254). The users were given the questionnaires on the basis of availability in the library during the period of data collection.

For an in-depth analysis of the phenomena the researcher targeted an information rich population among UON Library staff. Purposive sampling technique was used to select the staff who happen to be the bearers of critical information for this study.

Users of the UON Libraries targeted in this research were drawn from the College of Agriculture and Veterinary Sciences (CAVS), Population Studies and Research Institute (PSRI), Institute of Anthropology, Gender and African Studies (IAGAS), Institute of Development Studies (IDS) and School of Law (SOL). The staff was drawn from all the branches of UON Library. In order to achieve an equal representative sample for the cases under study, a ratio of 1 - 0.1081 was used to determine the distribution of the questionnaire among the library users as indicated in Table 3.4.

Table 3.4 Sample Distribution

Library Users	Strata	Total Population	Postgraduate		Acad. Staff		Total
			No	Mean	No	Mean	
	CAVS	261	157	**21**	104	**12**	**33**
	IAGAS	72	55	**9**	17	**4**	**13**
	IDS	50	40	**6**	10	**3**	**9**
	PSRI	58	48	**8**	10	**3**	**11**
	SOL	382	320	**45**	62	**7**	**52**
Total		**823**	**620**	**89**	**203**	**29**	**118**

3.5 Data collection methods

There are several methods of data collection at the disposal of the researcher. They are interviews, observation, questionnaires, physical artifacts, documentation and many more. The best data collection method is one that has the ability to address the purpose of the

research and help to answer the research questions (Leavy, 2017: 133). This part discusses the methods that were used to collect data from the primary source for analysis. The instruments the researcher used are questionnaires, and interview guide. The data collection methods were identified and preferred for their research complementary nature.

3.5.1 Questionnaires

According to Sekaran and Bougie (2016: 143) questionnaires are designed to collect qualitative and quantitative data. Though a flexible tool for data collection, questionnaire should be used carefully if the requirements of one given research have to be fulfilled (Walliman, 2011: 190). Therefore, the researcher personally distributed questionnaires in order to observe a high level of etiquette in the whole process. Closed-ended questions were used in the questionnaire because they are easy to analyze statistically (Jackson, 2016: 91).

3.5.2 Interview Guide

Interview guide gives the researcher the benefit of pursuing onesøown line of inquiry and the questions are mostly open-ended. There are two methods of conducting interviews a researcher can use to collect primary data. This can either be a face-to-face interview or telephone (Walliman, 2011: 192). The researcher, however, used the face-to-face method targeting library staff because of its advantages over the telephone interview. A structured interview with open-ended questions was used to collect data. Out of a total of 3 top managers, 1 was purposefully selected and out of the 9 Senior Librarians, 5 were purposively selected for the interview. The interview was fully transcribed to avoid omitting important information for analysis.

3.6 Pilot Study

Research instruments are important in ensuring that the data collected is valid and reliable. This helps to serve as a measure of ensuring validity and reliability in research work. Further, piloting in research ensures that the instruments which are deployed function well (Bryman, 2012: 209). The researcher, therefore, carried out a pilot study to check for errors on the questionnaires. The questionnaires were pre-tested using a small sample of 3 library users comprising 1 member of the faculty and 2 postgraduate students and 2 Librarians from similar working environment as the intended sample in this research. The pre-test survey was done at Kenyatta University Library, Parklands Campus. The sample was picked using purposive sampling technique. The findings showed that some questions were not clear.

Some respondent suggested complete deletion of certain question and rephrasing of others (Walliman, 2011: 191). These views were taken into consideration by the researcher who rephrased and deleted the identifed questions before the actual distribution of the questionnaire.

3.6.1 Validity

Validity is the ability of a test to measure what it is intended to measure (Bryman, 2012: 223). The researcher engaged experts and their observations and suggestions were used to guide the research study to ensure the validity of the research instruments. This was achieved from experimental designs which genuinely reflected the influence of the variables. As Walliman (2011: 204) opines, the quality of the data which is collected should enable generalizations to be made beyond the immediate study. Further, a researcher should take cognizant of the threats to validity of data among them being events which may cause interference between pre-test and post-test observations which can affect the results. Some of the factors which may compromise the validity of data according to Walliman (2011: 204) are: inappropriate measuring instruments, shortcoming of the human observer, bias in samples due to inadequate sampling methods, people reacting differently because they know they are being observed, among many. The researcher therefore, ensured only appropriate data collection tools for the research were used and questions posed were clearly understood.

3.6.2 Reliability

The concept of reliability is a measure of how dependable, predictable, consistent, stable, and honest a research instrument is (Bryman, 2012: 222-223). The higher the degree of consistency and stability, the greater the reliability of the research instrument in use. Reliability deals with accuracy. It concerns itself with the accuracy with which an instrument measures what it is meant to measure. The data collection tools were pre-tested before they could be deployed and this enhanced the understandability of the questionnaire and the research interview.

3.7 Data collection procedures

Data collection procedure is a process which is followed to ensure that data collection tools are applied correctly and efficiently. Data collection normally begins after the research problem has been determined (Kothari, 2014: 89). Typically, different data collection techniques are employed in order to generate appropriate and valid information (Mugenda,

2013: 39). The researcher collected data from users and the library staff at the university library under study using questionnaires and guided interview. Interview guide was used to collect data from the critical information bearers among library staff. The interview was captured using a template prepared by the researcher to avoid forgetting or omitting any useful information during analysis. Questionnaires were distributed among the respondents by the researcher.

3.8 Data Analysis

Descriptive analysis has been used to organize, discuss, code and tabulate data based on the research questions. According to O٥Leary (2014: 281), descriptive analysis describes the basic features of a data set and is important in presenting quantitative descriptions in a manageable and intelligent form while summarizing variables.

Each respondent was assigned a case number which was used during data analysis. Data was analyzed using Statistical Packages for Social Sciences (SPSS) software and Microsoft Excel Spreadsheet. Quantitative data obtained from the questionnaires was analyzed and displayed using frequency tables, charts and graphs and percentages. Qualitative data from the interviews was analyzed, interpreted and explained to provide an understanding of the research findings. The process included coding, editing and organizing data into thematic areas.

3.9 Ethical Considerations

Ethics is a branch of philosophy which concerns itself with what is right or wrong. Scientific research being a human activity is governed by moral and social values (Fouka and Mantzorou, 2011: 4). Ethical issues are moral judgments which can be applied to situations to help in making decisions and guide behaviour. To develop this relationship the researcher purposed to adhere to the following: Confidentiality; informed consent or choice; and avoid plagiarism. The researcher sought clearance from the institution under study for the survey and the potential respondents got full details about the research endeavour and confidentiality to participation was guaranteed. Participation in the study was voluntary. The results of the survey were generated from the intended survey population and no other.

3.9.1 Privacy and Confidentiality

The procedure of collecting data should observe settings that provide maximum privacy for the respondents. Confidentiality is the non-disclosure of research data to those that may use it for the unintended purpose. Similarly, it is the management of private information by a researcher so as to protect the identity of respondents (Fouka and Mantzorou, 2011: 6). Research participantsø right to remain anonymous should be respected. The participant should be allowed to determine how much information to divulge and how much to with-hold. The risks posed in a study are therefore, to be assessed in order to be able to address accurately issues of confidentiality throughout the research and the researcher endeavoured to uphold the same.

The researcher distributed questionnaires to the respondents to fill them at their own convenient time and personally collected them back. There was not a single questionnaire that could be traced back to the original respondent. The respondents were not asked to provide any information that could betray them. A high level of confidentiality was observed throughout the study as there were no intermediaries between the respondents and the researcher.

3.9.2 Informed Consent

Informed consent is a basic principle which should be communicated to the respondents before the start of the study (Walliman, 2011: 261-263). This should be an active process throughout the study. In any research undertaking, a researcher should ensure that the respondents fully understand the risks and discomfort the information being provided can cause. It will amount to unethical behaviour if the researcher will fail to disclose the real purpose of the research for fear of the respondentsø refusal to participate. It is for this reason that the researcher should disclose the nature and purpose of the study and document that the information obtained was through informed consent. A participant should be free to choose to take part or not in the research and if so wishes can withdraw at any point without consequence. The necessary authority for the research undertaking was sought after and information was provided voluntarily.

3.9.3 Plagiarism

Plagiarism is an academic crime. It is false attribution of ideas which according to Bailey (2011: 30) involves presenting other scholarsø ideas as oneøs original thought without

acknowledging the source. Plagiarism is a manifestation of academic dishonesty. Further, citing a source where a work is not obtained from also amounts to academic dishonesty. Similarly, internet sources of information through the acts of copy and pasting practices have greatly contributed to fabrication and falsification of research output. These are vices the researcher sought to overcome in this study.

3.10 Chapter Summary

The issues discussed in this chapter pertain to the methodology used to conduct the research study. The researcher identifies descriptive type of research as most appropriate for the study. The study area is on the implementation of KM as a tool for sustainable competitive advantage and the target population is library users and staff of UON library. The method for selecting the sample, how data was collected and pre-testing of the data collection tools has been provided. Further, the method for analyzing the collected data and ethical issues the researcher was committed to have also been discussed.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter seeks to analyze and interpret data collected during the period of the study. The aim of the study was to investigate the implementation of Knowledge Management practices as a tool for sustainable competitive advantage at the University of Nairobi Library. Questionnaires and interview schedule were used to obtain data and information for the study. A sample size of 118 respondents was studied. The return rate for the questionnaires was 78% while the number of those interviewed was 6 members of the library staff. This represented 92 questionnaires that were returned and 16 unreturned. Quantitative data was analyzed using Microsoft Excel application, while qualitative data was processed using SPSS. This chapter presents data findings in percentages, graphs, charts and tables based on the research objectives and questions.

4.1 Background Information of the Respondents

The research study sought to establish background information of the respondents based on library user category, and library staff job description, academic background and work experience. In terms of library users who responded to the research inquiry, 10(11%) were lecturers and 59(64%) Postgraduate students while 23(25%) were library staff.

The population for library users was 823, with a sample size of 89. The response rate was 10 (9%) academic members of staff, and 59 (52%) postgraduate Students. The population for the library staff was 40 with a sample size of 29. The response rate was 1(4%) Top management member, 4 (17%) Senior Librarians, 8 (35%) Librarians and 10(43%) Senior Library Assistants. The accessible population was 863 with a sample size of 118. The response rate was 81% as shown in Table 4.1.

Table 4.1 Response Rate

Strata	Population	Sample	Response Rate
Library Users	823	89	69
Library Staff	40	29	23
TOTAL	**863**	**118**	**92**

Among the library staff who responded to the research inquiry, there was 1(4%) Top Level Management staff 4 (17%) Senior Librarians, 8 (35%) Librarians, and 10 (44%) Senior Library Assistants as indicated in Figure 4.1. Respondents who did not return their questionnaires were 6 (20.7%)
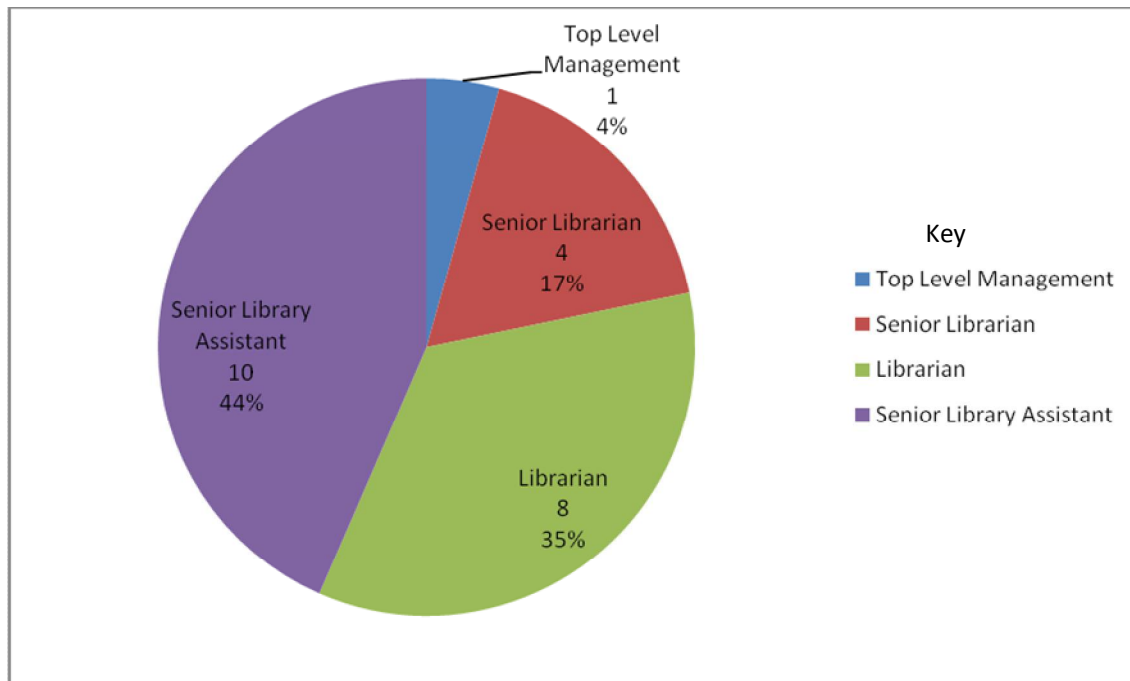
Figure 4.1 Library Staff

4.1.1 Educational Level

This study sought to know the educational level of the respondents who participated in the study and the results are as indicated in Figure 4.2. 10(43%) of staff who responded were

holders of a bachelors degree, while 13(57%) were holders of a masters degree. The other category of the respondents comprised Postgraduate students and Lecturers.
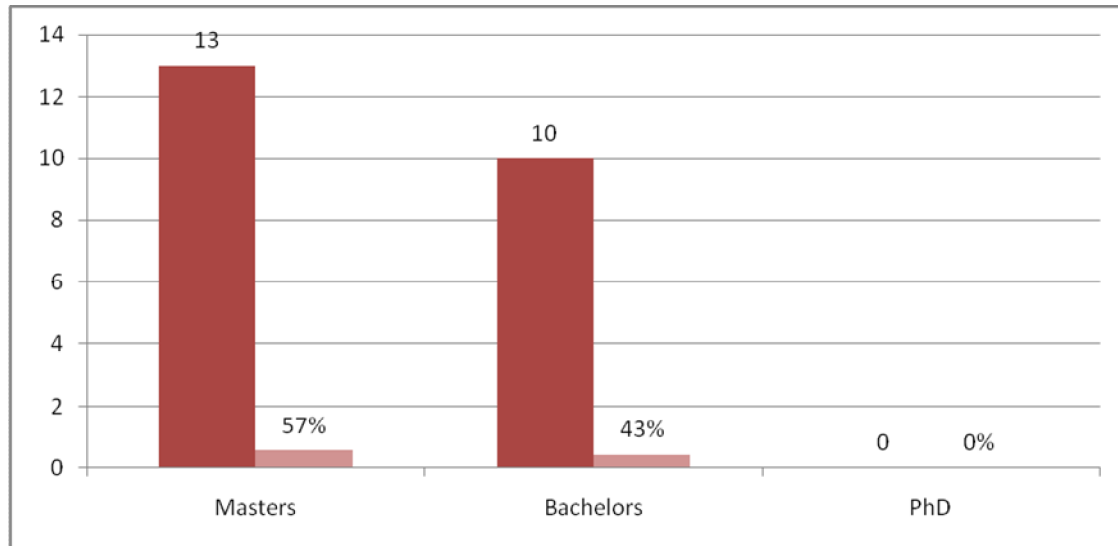
Figure 4.2 Library Staff Education Background

4.1.2 Work Experience

Work experience equips an individual with soft skills which are a value addition to product and services. Building useful skills which are not taught in the classroom is a source of competitive advantage for many institutions. This research therefore, sought to find out the work experience of the LIS professionals and the findings are as indicated in Figure 4.2. Those who had served for 0-5 years were 2 (9%), 5-10 years were 10(43%), and 10 years and above were 11(48%).
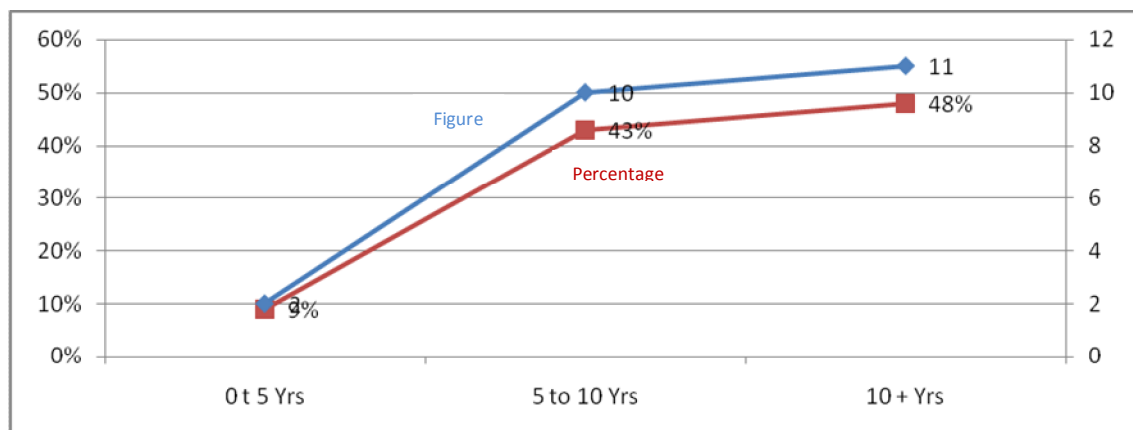
Figure 4.3 Library Staff Work Experience

4.2 Knowledge Management Practice at the UON Library

Using the Likert Scale 1-5 where 1 is strongly disagree and 5 strongly agree, the study sought to find out the status of KM practice in the library. 18(78%) of the respondents said they were aware and 5(22%) said they were not. The high rate of those agreeing KM is practiced at the UON Library is collaborated by Jain (2013: 1) who avers that libraries have always played a key role in managing knowledge. When the respondents were asked to state at what stage of practice KM was, 12(50%) strongly agreed that it was at the introductory stage, 2(8%) agreed, 2(8%) did not know, 6(25%) strongly disagreed and 2(8%) disagreed. In terms of whether KM was not being practiced at all, 8(33%) strongly disagreed, 6(25%) disagreed, while 4(17%) agreed and a paltry 2(8%) strongly agreed. 25% of those who disagreed is quite a big number which shows KM is a concept yet to be understood well by some library staff members. While reacting to the question whether KM was being practiced but in a different name 8(33%) agreed, while 6(25%) strongly agreed and strongly disagreed respectively. This is because there is a thin line between Knowledge Management practice and Information Management. Regarding whether KM has been incorporated as a strategic management component in the library, majority 8(33%) did not know, while 6(25%) strongly agreed and strongly disagreed respectively, and minority 4(17%) agreed. Further, 8(33%) did not know whether there are policies supporting KM practices in the library and only minority 2(8%) were in agreement. The findings are shown in Table 4.2. According to one of the interviewees:

"Global web metric ranking among universities has enabled UON library to remain focused towards achieving and sustaining service provision excellence amid stiff competition." (Respondent 2)

Table 4.2 Knowledge Management Practice at the UON Library

KNOWLEDGE MANAGEMENT (KM) PRACTICE AT THE UON LIBRARY	5	4	3	2	1	Total
Is at its introductory stage	(11)50%	(2)8%	(2)8%	(6)25%	(2)8%	(23)100%
Is not practiced at all	(2)8%	(4)17%	(2)8%	(8)33%	(6)25%	(23)100%
It is being practiced though not under the same name	(6)25%	(8)33%	(2)8%	(6)25%	(2)8%	(23)100%
It is incorporated as a strategic management component of the library	(6)25%	(4)17%	(8)33%	(6)25%	0	(23)100%
There are policies supporting KM practices in the institution	(4)17%	(2)8%	(8)33%	(8)33%	0	(23)100%

4.3 Knowledge Management practice awareness among library Staff

This study sought to find out from LIS professionals if KM is what they always do but in a different name. By the use of Likert Scale 1-5 where 1 is strongly disagree and 5 strongly agree, majority of the respondents 9(42%) agreed followed by 8(33%) who strongly agreed. Those who did not agree were minority 2(8%) and 4(17%) did not know. Regarding whether it is difficult to differentiate between Information Management and Knowledge Management, a majority of the respondents at 9(42%) were in agreement it is difficult and 6(26%) did not agree as indicated in Table 4.3. 5(20%) of the respondents strongly agreed it is difficult to differentiate the two concepts and a minority 3(12%) were neutral. This is the same number of respondents who stated they are unable to distinguish between Knowledge Management and Information Management. Further, majority 17(75%) agreed strongly that KM practice can make libraries more relevant to their parent institutions, while 4(17%) agreed, and only a paltry 2(8%) strongly disagreed. Motaghi-Far (2012: 1473-1475) has argued that libraries practicing KM can add value for parent institutions. Another question posed to the respondents was whether KM can contribute towards improved value-added services in university libraries, and majority 15(65%) was strongly in agreement while 6(27%) agreed. This confirms Jain's (2013:1) assertion that KM practice in university libraries is intended to improve services to the clientele. However, 2(8%) of those polled did not know. Regarding whether KM can enable LIS professionals to change from being service-oriented to value-

oriented, majority 13(56%) strongly agreed, 8(36%) agreed, and minority 2(8%) strongly disagreed.

In terms of whether KM can contribute towards improved future prospects of the UON Library, a majority 14(62%) strongly agreed, 7(30%) agreed, and only 2(8%) strongly disagreed with this statement. According to Ohiorenoya and Eboreime (2014: 403) university libraries practicing KM will achieve the highest competitive advantage. Majority 16(68%) were strongly in agreement that LIS professionals should promote KM initiatives while 5(24%) agreed, and 2(8%) did not agree. A respondent when interviewed had this to say:

> *"Workshops are conducted regularly to equip staff with skills on the emerging trends in the information sector. They are supposed to be more frequent and all inclusive but not enough funds are allocated for the exercise*ö (Respondent 6).

Table 4.3 KM Practice Awareness among Library Staff

AWARENES OF KM PRACTICE AMONG LIBRARY STAFF	5	4	3	2	1	Total
KM is what LIS professionals have always done under a different name	(8)33%	(9)42%	(4)17%	(2)8%	0	(23)100%
It is difficult to differentiate Information Management and KM	(5)20%	(9)42%	(3)12%	(6)26%	0	(23)100%
KM practices can make libraries more relevant to their parent institutions and users	(17)75%	(4)17%	0	(2)8%	0	(23)100%
KM can contribute towards improved value added library services	(15)65%	(6)27%	(2)8%	0	0	(23)100%
KM can enable LIS professionals to change from being service-oriented to value-oriented	(13)56%	(8)36%	0	(2)8%	0	(23)100%
KM can contribute towards improved future prospects of university libraries	(14)62%	(7)30%	0	(2)8%	0	(23)100%
LIS professionals should promote KM initiative	(16)68%	(5)24%	(2)8%	0	0	(23)100%

4.4 Knowledge Management (KM) Activities

A question whether KM facilitates written KM policy in the library was posed to the respondents requiring them to agree or disagree using the Likert scale 1-5 where 1 is strongly disagree and 5 is strongly agree. The findings were as follows: 9(42%) strongly agreed, 5(24%) agreed, 4(17%) were neutral and strongly disagreed respectively as indicated in Table 4.4. Respondents who were interviewed reacted as indicated below:

> *"Knowledge management is a wide and complex discipline. That is why it is not easy to come up with one central KM policy for an institution.* (Respondent 1). *Policies affecting independent components of KM like IR do exist* (Respondent 5).ö

Majority of the respondents 12(50%) agreed that KM facilitates the identification of knowledge required for planning, followed by 8(33%) who strongly agreed, and 4(17%) did not know. Ohiorenoya and Eboreime (2014:402) have indicated that university libraries practicing KM achieve profound effects on performance. Regarding the identification of personal expertise, 12(50%) agreed that KM can facilitate this, while 8(34%) strongly agreed, and 2(8%) disagreed and strongly disagreed respectively. Roy (2015: 22) argues that LIS professionals should constantly acquire knowledge and skills pertinent to the work they do by practicing KM. Majority 12(50%) strongly agreed that KM facilitates knowledge mapping within an institution, 8(33%) agreed, and 4(17%) did not know. Further, 15(67%) strongly agreed that KM facilitates the creation of a system to capture tacit knowledge of employees, 6(25%) agreed, and 2(8%) did not agree. According to Rusuli et al (2013: 154) KM first process is the creation of knowledge which then has to go through the full KM cycle. This knowledge is then captured, processed and stored for reuse. The study also sought to find out whether KM facilitates the availability of knowledge enabling technology, 12(50%) strongly agreed, 9(42%) agreed, and 2(8%) did not know. Technology is a critical enabler of KM in university libraries. It facilitates the capture and sharing of knowledge within an institution (Kumar, 2010: 27). Regarding, whether KM facilitates the focus on creativity and innovation, 9(42%) strongly agreed, 8(33%) agreed, 4(8%) did not agree while 4(17%) strongly disagreed. The study also sought to find out if KM facilitates the establishment of knowledge repositories where 12(50%) strongly agreed, 8(33%) agreed, and 4(17%) strongly disagreed. Majority of the respondents 12(50%) agreed that KM facilitates collaboration and strong partnership with other libraries while 9(42%) strongly agreed, and 2(8%) did not know. The research also sought to find out from the correspondents whether KM facilitates the

establishment of a strong culture for knowledge sharing, majority 12(50%) strongly agreed, 9(42%) agreed, and 2(8%) did not know. According to Kumar (2010: 26) KM practice in every key area of university library services includes providing the means of access and sharing information. Through the deployment of knowledge sharing technologies, such as repositories, institutions are able to collaborate in resource acquisition (Jain, 2013: 4-5). Further, 12(50%) strongly agreed that KM facilitates knowledge transfer between the õknowerö and the one needing it, 8(33%) strongly agreed, and 4(17%) strongly disagreed. Asked whether KM can facilitate competitive advantage for university libraries, 12(50%) strongly agreed, 9(42%) agreed, and 2(8%) were neutral.

Table 4.4 Knowledge Management (KM) Activities

KNOWLEDGE MANAGEMENT (KM) PRACTICE FACILITATES	5	4	3	2	1	Total
Written KM policy in the library	(9)42%	(6)24%	(4)17%	(4)17%	0	(23)100%
Identification of knowledge required for planning	(8)33%	(11)50%	(4)17%	0	0	(23)100%
Identification of personal expertise	(8)34%	(11)50%	0	(2)8%	(2)8%	(23)100%
Knowledge mapping within the institution	(11)50%	(8)33%	(4)17%	0	0	(23)100%
Creation of a system to capture tacit knowledge of employees	(15)67%	(6)25%	(2)8%	0	0	(23)100%
Availability of knowledge enabling technology	(12)50%	(9)42%	(2)8%	0	0	(23)100%
Focus on creativity and innovation	(9)42%	(8)33%	(2)8%	(4)17%	0	(23)100%
Establishment of knowledge repository	(11)50%	(8)33%	0	(4)17%	0	(23)100%
Strong partnership with other libraries	(9)42%	(12)50%	(2)8%	0	0	(23)100%
A strong culture of knowledge sharing	(12)50%	(9)42%	(2)8%	0	0	(23)100%
Knowledge transfer	(11)50%	(8)33%	0	(4)17%	0	(23)100%
Competitive advantage	(12)50%	(9)42%	(2)8%	0	0	(23)100%

4.5 Implementation of Knowledge Management (KM) Practices at the UON Library

The study sought to find out whether the library had a KM policy and the findings are as indicated in Table 4.5. The respondents were asked to indicate the statements they agreed with and from the findings, a paltry 2(8%) indicated there is a KM policy. This could mean lack of it in the library. On whether the library carries out identification of the required knowledge for planning, it is only 9(42%) who replied in the affirmative. Personal expertise is at the core of a firmøs competitive advantage. Regarding its identification and application at the UON library, only 8(33%) were in agreement that it takes place. Knowledge mapping is the process of creating a knowledge map which captures an organizationøs critical knowledge. A knowledge map reveals weak links, if any, in the flow of information within the organization. As a result corrective measures are put in place to improve the situation so that the right knowledge reaches the intended people at the right time. From the data collected, 12(50%) indicated that knowledge mapping is practiced in UON library.

Tacit knowledge is the knowledge embedded in the minds of people. This is the knowledge that people accumulate over time through learning and work experience. Tacit knowledge is at the core of efficiency and effectiveness of an organization (Stanley and Davidson, 2011: 27). The study sought to find out whether there was a system to capture this knowledge from the employees and only 8(33%) responded in the affirmative. However, whether a knowledge enabling technology was available in the library or not, majority 17(75%) indicated that it existed. Organizations leverage KM for creativity and innovation. Admittedly, this is the only way for them to come up with value enhanced services and products. When the researcher sought to find out whether the UON library encouraged creativity and innovation among the employees, 13(58%) responded in agreement.

An Institutional Repository serves as an archive of an organizationøs intellectual assets. It archives, preserves and disseminates digitally institutional memory. Institutional repository is a critical KM component. This study sought to find out whether the UON library has established an IR and 19(83%) indicated that there is an IR. Most institutional repositories are open source. They contribute immensely towards collaboration and partnership among university libraries. Other collaborative ventures are joint acquisition of resources. When the researcher sought to know whether there was any partnership with other libraries from the respondents, only 8(33%) responded to confirm this position. This finding therefore, confirms the existence of knowledge sharing culture among institutions but when it came to individual

employees of UON library, the opposite was the case as a paltry 4(17%) of the respondent agreed to the existence of knowledge sharing culture among them. During interview, a respondent had this to say:

*"Collaboration between libraries intended to share information resources used to be a common feature before universities in this country started to admit a large number students thus, overstretching their own resources. It may take a long time to develop capacity for these institutions to spare anything to lend out on inter-library loan*ö (Respondent 3).

Competitive advantage is a condition which puts an organization in a more superior and favourable position over the competitor. This attribute enables the organization to outperform the competitors. For instance, the UON library prides on having one of the most visible IR in Africa. Therefore, when the research sought to find out from the respondents whether the library is conscious of the competition faced and worked towards overcoming it, 10(42%) replied to the affirmative.

Table 4.5 KNOWLEDGE MANAGEMENT (KM) IMPLEMENTATION AT UON LIBRARY

KNOWLEDGE MANAGEMENT (KM) PRACTICES AT UON LIBRARY	RESPONSE RATE
There is written KM policy	(2)8%
Identification of knowledge required for planning	(10)42%
Identification of personal expertise	(8)33%
Knowledge mapping within the institution	(12)50%
Creation of a system to capture tacit knowledge of employees	(8)33%
Availability of knowledge enabling technology	(17)75%
Focus on creativity and innovation	(13)58%
Established knowledge repository	(19)83%
Strong partnership with other libraries	(8)33%
A strong culture of knowledge sharing	(4)17%
Knowledge transfer	(12)50%
Competitive advantage	(10)42%

4.6 Knowledge Management Skills

A leader is someone who commands or leads a team of people. Leadership is therefore, a characteristic premised on this role. It entails planning, organizing, making decisions and

responding to situations where one is required to lead socially or professionally to achieve value-addition. Using the Likert scale 1-4 where 1 is unimportant and 4 is very important, the research sought to find out how the respondents rated leadership skills in KM practice and 17(75%) rated it as very important whereas 6(25%) considered it as important. Regarding the ability to communicate well in KM practice, majority of the respondents felt that it is important 12(52%) and 11(48%) very important, thus, giving credence to the assertion by Rajurkar (2011: 3) that interpersonal communication is a core competence for LIS professionals. ICT has been cited by Kumar (2010: 27) among other KM scholars as an enabler of KM. This is confirmed by majority 15(67%) respondents who view ICTs as very important followed by 6(28%) rating it as important and a paltry 2(5%) do not know whether it is important or not. Successful management of change is critical to any organization's bid to survive a highly competitive business environment. The respondents have rated change management as a competence in KM fairly well with majority 10(44%) indicating it is important, 8(38%) very important, 3(12%) do not know and 2(6%) as unimportant. Infusing creative thinking into the implementation and practice of KM initiatives in an organization is critical in edging out competition. A majority of the respondents 13(56%) indicated that creative thinking is very important in KM practice, 7(31%) important and only 3(13%) thought it is not. Information and document management is what LIS professionals have always done. From the responses in Table 4.6, 16(72%) agreed that it is a very important competence for KM practice and 5(23%) as important. Teamwork is the process of working collaboratively towards achieving one common goal. The research sought to find out how the respondents rated teamwork and a majority 16(72%) indicated very important. 5(23%) indicated they do not know whether teamwork in KM practice is important and this number could be attributed to those who do not understand the concept KM. This same number of 5 respondents has been retained when the research sought to find out how the respondents rated decision making as a core competence in KM practice. However, 13(58%) indicated it is very important and 4(17%) important.

Table 4.6 KNOWLEDGE MANAGEMENT SKILLS

KM SKILLS REQUIREMENT FOR LIS PROFESSIONALS	4	3	2	1	Total
Leadership skills	(17)75%	(6)25%	0	0	(23)100%
Communication	(11)48%	(12)52%	0	0	(23)100%
ICTs compliant	(15)67%	(6)28%	(2)5%	0	(23)100%
Change management skills	(8)38%	(10)44%	(3)12%	(2)6%	(23)100%
Creative thinking	(13)56%	(7)31%	(3)13%	0	(23)100%
Information and document management skills	(16)72%	(5)23%	(2)5%	0	(23)100%
Teamwork	(16)72%	(2)5%	(5)23%	0	(23)100%
Decision making	(13)58%	(4)17%	(6)25%	0	(23)100%

4.7 Knowledge Management Achievements

The main objective of a university library is to provide the right information to the right user in the right format and at the right time. Jain (2013: 2) opines that KM provides university libraries an opportunity to change for the better their approach to service delivery. The research therefore, sought to find out whether implementation of KM could benefit the UON library in terms of achieving library goals and objectives using the Likert scale 1-3 where 1 is disagree and 3 is agree and an overwhelming majority 21(92%) indicated they agreed while a paltry 2(8%) were neutral. New knowledge creation is critical for innovation and growth for many organizations that endeavour to offer effective and efficient services. Majority of the respondents are alive to this fact because 19(83%) indicated their agreement, and 4(17%) were neutral. Sharing knowledge provides an opportunity for mutual learning which may result in enhanced organizational performance (Reinholt, Pedersen and Foss, 2011: 1277). Knowledge sharing and transfer are both interactive processes where interchange of knowledge between the holder or õknowerö and those who need it happen. The researcher sought to find out from the respondents whether the implementation of KM would provide an enabling environment leading to knowledge sharing and transfer among employees, collaborators and partners. After the question, an overwhelming majority 21(92%)

respondents were in agreement and 2(8%) were neutral. By applying KM systems, duplication of effort is greatly reduced and this minimizes the duration taken to offer a service (Jain, 2013: 8). This position received overwhelming support by 19(83%), 4(17%) neutral and 2(8%) disagreed. For LIS professionals to perform the service of information and knowledge dissemination effectively, they need to have a complete and accurate recall of all the information in their collection but this may not be ideally practicable (Arif and Alsuraihi, 2012: 530). KM practice offers the much deserved solution to this predicament. This is through the deployment of the requisite technology and adequate skilled workforce. The study sought to find out whether the respondents perceived the implementation of KM as a precursor to enhanced job performance among LIS professionals where 17(75%) agreed and 6(25%) were neutral. Improved personal performance among library staff is evidently echoed in the overall work performance. Thus 84% respondents agreed to this fact, 2(8%) were neutral and disagreed respectively.

Table 4.7 KNOWLEDGE MANAGEMENT ACHIEVEMENTS

KM ACHIEVEMENTS	3	2	1	Total
Library goals and objectives efficiently	(21)92%	(2)8%	0	(23)100%
New knowledge creation	(19)83%	(4)17%	0	(23)100%
Knowledge sharing and transfer	(21)92%	(2)8%	0	(23)100%
Accomplishing tasks quickly	(17)75%	(4)17%	(2)8%	(23)100%
Enhanced job performance among LIS professionals	(17)75%	(6)25%	0	(23)100%
Improved overall work performance	(19)84%	(2)8%	(2)8%	(23)100%

4.8 User Satisfaction Survey

The core business of a university library is to provide information services to students and faculty members for studies, teaching and research activities. The service so rendered should fulfill these needs for satisfaction to result. A user satisfaction survey therefore, becomes one of the crucial measurements to determine this. User satisfaction in the context it has been used in this study is an evaluation of a service in terms of whether it meets user needs and

expectations (Itumeleng, Wallis and Karodia, 2014: 41). Users were required to indicate their level of agreement to statements the researcher put to them using the Likert scale 1-5, where 1 is strongly disagree and 5 is strongly agree.

The study sought to find out from the users whether all the information needed is available in the library and majority 41(59%) indicated they agreed, 19(27%) strongly agreed, 6(9%) strongly disagreed and 3(5%) disagreed. However, some of the respondents felt that the library needed to acquire latest edition of both print and electronic information materials. Regarding whether the staff were courteous, 35(50%) agreed, 28(41%) strongly agreed, 3(5%) did not know and disagreed respectively. In terms of whether library staff is knowledgeable and able to offer answers to queries, 38(55%) agreed with this statement, 28(41%) strongly agreed, and 3(5%) did not know. Reacting to whether library staff is always ready to assist, 35(50%) of the respondents strongly agreed, 25(36%) agreed, 3(5%) did not know, disagreed, and strongly disagreed respectively. Further, the study sought to find out whether the library staff always offered prompt service and 30(44%) agreed, 25(36%) strongly agreed, 6(9%) did not know and strongly disagreed respectively. The hours of operation and the convenience of accessing a university library are some of the key motivators to library use. 25(36%) of the respondents strongly disagreed that the operating hours are enough and convenient, 20(32%) agreed, 10(14%) did not know, 10(14%) strongly disagreed and 3(5%) disagreed. However, some respondents were of the suggestion that weekend operating hours should be increased. Regarding whether library staff offers prompt feedback, a majority 30(44%) agreed, 25(36%) strongly agreed, 6(9%) strongly disagreed and 3(5%) did not know. Further, the respondents were asked to react to whether the library uses modern technology in information access and retrieval and 35(50%) agreed, 21(31%) strongly agreed, 10(14%) did not know and 3(5%) strongly disagreed. Some of the respondents were of the view that the number of computers should be increased, wifi access be enhanced, and access to electronic information materials off-line be enabled. The study also sought to find out whether library facilities are user friendly and 35(50%) strongly agreed, 22(31%) agreed, 6(9%) did not know, 3(5%) strongly disagreed and disagreed respectively.

Table 4.8 USER SATISFACTION SURVEY

USER SATISFACTION STATEMENTS	5	4	3	2	1	Total
The library has all the information you need	(19)27%	(41)59%	0	(3)5%	(6)9%	(69)100%
The library staff is always courteous	(28)41%	(35)50%	(3)5%	(3)5%	0	(69)100%
The library staff is knowledgeable and able to offer answers to questions	(28)40%	(38)55%	(3)5%	0	0	(69)100%
The library staff is always ready to assist you	(35)50%	(25)35%	(3)5%	(3)5%	(3)5%	(69)100%
The library staff offers prompt service	(25)36%	(32)46%	(6)9%	(6)9%	0	(69)100%
The library operating hours are enough and convenient	(26)35%	(20)32%	(10)14%	(3)5%	(10)14%	(69)100%
The library staff offers prompt feedback	(25)36%	(30)44%	(8)11%	(6)9%	0	(69)100%
The library uses modern technology in information access and retrieval	(21)31%	(35)50%	(10)14%	0	(3)5%	(69)100%
The library facilities are user friendly	(35)50%	(22)31%	(6)9%	(3)5%	(3)5%	(69)100%

4.9 Knowledge Management Challenges in University Libraries

Professionals working in academic libraries leverage Knowledge Management to achieve organizational goals and provide value-added services to the clientele. But impediments towards fulfilling this feat abound. The study sought to find out from the respondents what challenges were experienced in implementing KM at the UON library. The following challenges were identified:

Compartmentalization was identified by 1(4%) respondent as one of the challenges implementation of KM practice in university libraries face. This is because discrete units like cataloguing, acquisition, circulation, digital content, serial management and graduate research tend to confine their activities within themselves and what goes on in other units stays out of their purview. It is this kind of arrangement which impedes the conversion of individual knowledge into organizational knowledge as cited by Mavodza and Ngulube (2011: 15). Through such an arrangement, staff working in one unit of the library may experience challenges understanding what goes on in the other sections. Staff should therefore, be deployed to serve in all the sections of the library through an arrangement intended to facilitate information flow in the entire library system. Difficult to work with other

libraries was cited by 6(20%) respondents and weak knowledge sharing culture was also cited by 14(52%) as challenges towards KM practice in the library because they impede knowledge flow. Top-bottom style of management was the other impediment cited by 2(8%) respondents and lack of management support by 17(74%) facing KM implementation. Lack of top management support will bring to nought any attempt in KM practice in any institution. Top management therefore, should be involved in every step of KM implementation process. In the case of bottom-up model, those who create information are the middle and lower level managers (Lessem, 1998: 329). Lessem further opines that this model is good at dealing with tacit knowledge.

Dearth of professionals in KM practice was cited by 1(4%) respondents. Lack of KM professionals especially in university libraries can be attributed to lack of incentives as indicated by 16(70%) respondents, lack of interest among library and information practitioners 3(13%) and insufficient budget 16(70%) which Jain (2012: 142) argues are an impediment to KM practice. Lack of staff training was indicated by 2(9%) respondents and lack of seminars and workshops by 11(48%) as challenges to KM practice in university libraries. Lack of incentives to share knowledge which Jain has also alluded to was cited as one of the challenges KM implementation in university libraries is facing. Jain has also cited intellectual challenge which was cited by 5(22%) respondents as an impediment towards realizing KM practice. The KM concept is not well understood by library and information practitioners as indicated by 4(17%).

A diverse user community was cited by 2(9%) respondents as a challenge and this was as a result of the different approaches different users use to access and use knowledge. This is because of the divergent user interests, approaches and capabilities which include level of education and physical challenges.

Other challenges cited by the respondents were failure to tap tacit knowledge 2(9%), lack of technical infrastructure for storing knowledge 8(39%) and individualism of knowledge 2(9%). When an individual who is the bearer of critical organizational knowledge leaves employment, tacit knowledge also exits.

Lack of KM policy was cited as one of the challenges KM practice is facing by 8(39%) respondents. Though policies exist touching on some aspects of KM practice like institutional repositories, a centralized one was not available. The fear of the unknown and issues surrounding personal information were cited as some of the challenges in KM practice by

4(17%) respondents. The use of technology and social media platforms were especially mentioned as possible sources of information LIS practitioners would rather keep private and this has been alluded to by Balague, Duren and Saarti (2016: 188-189).

Lack of ICT infrastructure was the other challenge indicated by 8(39%) respondents as a challenge facing the implementation of Knowledge Management in university libraries. This has been collaborated by Jain and Joseph (2013: 9) who state that ICT infrastructure is insufficient condition for the success of Knowledge Management but a necessary condition for it. They further state that lack of sufficient technology cripples the successful implementation of Knowledge Management in university libraries.

4.10 Chapter Summary

This chapter has presented the results of the analyzed data. The study has examined the status of KM implementation and practice at the UON library. The level of understanding KM concept among library staff and how it has been embedded in the library processes has been studied. User satisfaction and the challenges of implementing KM have also been analyzed.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter provides the key findings, conclusion and recommendations of the research study. It also suggests areas of study for the implementation of KM in university libraries. The purpose of the study was to investigate the implementation of Knowledge Management practices as a tool for sustainable competitive advantage at the University of Nairobi Library. The specific objectives of the study were: to determine the extent to which Knowledge Management is practiced at the University of Nairobi Library, to determine which Knowledge Management strategies can generate sustainable competitive advantage at the University of Nairobi Library, to evaluate the effectiveness of Knowledge Management as a source of sustainable competitive advantage at the University of Nairobi Library, and to identify the challenges encountered in implementing Knowledge Management strategies for sustainable competitive advantage at University of Nairobi Library.

5.1 Summary of the Key Findings

This section highlights the findings of the study guided by the research objectives.

5.1.1 Awareness of KM implementation and practice at UON library

The first objective of this research was to determine the extent to which Knowledge Management is practiced at the University of Nairobi Library. According to the findings, 19(78%) of the respondents were aware of KM practice in the library and 12(50%) indicated that it was at its introductory stage as shown in Table 4.2. Additionally, 8(33%) of the respondents strongly disagreed with the statement that KM was not being practiced at all followed by 6(25%). Daland (2016: 28) argues that librarians are information workers and there is a likelihood KM could be applied in academic libraries. This was determined to be true according to the research findings. However, it is a paltry 2(8%) who indicated that there was a KM policy at UON Library. That could be informed by the sentiments of respondents 1 and 5 who alluded to the existence of policies affecting certain KM components like the IR and not a central KM policy for the library.

5.1.2 KM strategies used at the University Of Nairobi Library

The second objective was to determine which Knowledge Management strategies could generate sustainable competitive advantage at the University of Nairobi Library. Despite the fact that UON library had not formulated a KM policy to guide its operations, some elements of its use were indicated by the respondents. 19(83%) of the respondents confirmed that the institution had established knowledge repository followed by 17(75%) indicating the availability of knowledge enabling technology. Embracing new ideas and keeping abreast of emerging issues in information and knowledge management appear to be at the centre of operations at the UON library. This was confirmed by 13(58%) of the respondents who indicated that the library focused on creativity and innovation in its operations. However, there seemed to be lack of knowledge sharing culture among the library staff according to the research findings that showed only 4(17%) respondents indicated its existence. Lack of knowledge sharing culture has been cited by Jain (2012: 149) as one of the challenges in KM practice. Lack of it puts the UON Library in a precarious position in achieving its mandate. Other strategies used by the library to manage knowledge were knowledge mapping which was confirmed by 12(50%) respondents, followed by identification of knowledge required for planning and competitive advantage at 10(42%) respectively. This is an important aspect of KM practice because it enables management to identify needs for capacity building. Due to lack of knowledge sharing culture, the anticipated outcomes will still remain elusive. The other strategies which weighted at 8(33%) are the identification of personal expertise and strong partnership with other libraries respectively. Although creativity and innovation was rated highly at 13(58%) and was supported by the rating given to new knowledge creation 19(83%), the environment within which university libraries operate is heavily interdependent and the absence of strong partnership is recipe for failure in information dissemination. That is because the 8(33%) indicating that the library enjoys strong partnership with other university libraries is below par.

5.1.3 KM effectiveness for sustainable competitive advantage

The third objective was to evaluate the effectiveness of Knowledge Management as a source of sustainable competitive advantage at the University of Nairobi Library. An array of critical KM skills required for library staff to achieve this feat received overwhelming approval at between 9(38%) and 17(75%) as indicated in Table 4.6. But from the challenges that were indicated by the respondents, among them selective KM training for staff, it means that KM

practice had not achieved much. There was overwhelming support for the achievements KM practice can bring in a university library as indicated in Table 4.7. However, in Table 4.5 the respondents indicated below average in most of the KM practices at the UON library. The assessment of the respondents from among the library staff revealed that a paltry 2(8%) indicated there was a KM policy in the library. Knowledge sharing which is at the core of KM practice was rated at 4(17%). Identification of personal expertise, strong partnership with other libraries and creation of a system to capture tacit knowledge were among KM practices rated below average. However, established knowledge repository was rated highly at 19(83%) and availability of knowledge enabling technology 17(75%). This was collaborated by an interviewee, No. 2 who did indicate that global web metric ranking among universities has enabled UON library to remain focused on achieving and sustaining excellent service provision amid stiff competition. The effectiveness of a service can best be measured by a user satisfaction survey as quality in library work can only be defined from the usersø perspective and not predefined by a libraryøs standards. A user survey the researcher conducted largely gave a fair assessment of the UON Library services as indicated in Table 4.8. However, the number of those expressing neutrality in the issues posed to them is worrying and further investigation needs to be done to find out why they took that position. This is because a university library need to ensure the that users are always satisfied with their services (Itumeleng,Wallis and Karodia 2014: 41). Though, expressing satisfaction with the services of the library as illustrated in Table 4.8, users again raised issues of concern with regard to the currency of the information resources, the technology that facilitates their access and retrieval and the limited hours of operation.

5.1.4 Challenges faced by UON Library in implementing Knowledge Management

The fourth objective was to identify the challenges encountered in implementing Knowledge Management strategies for sustainable competitive advantage at University of Nairobi Library. In determining this, the study findings revealed a number of factors hindering the implementation of KM as lack of KM policy, departmentalization, dearth of professionals in KM, a diverse user community, failure to tap tacit knowledge as it leaves the library together with the bearer, fear of the unknown, individualism of knowledge, infrastructure for storing tacit knowledge, KM is a new area which is not utilized, lack of communication skills, lack of cooperation between senior and junior staff, lack of incentives/motivation which according to Daland (2016: 38) must be considered in successful KM implementation, lack of interest

among LIS professionals, lack of management support, lack of seminars and workshops, lack of skills, lack of sufficient budgets, lack of tools and technology, legal issues in knowledge sharing especially copyright, management bias in KM training members for staff, the concept is not well understood, top-bottom management practice, and lack of knowledge sharing culture.

5.2 Conclusion

In reference to the findings and discussion in the preceding sections, the study makes the following conclusion:

- KM is concerned with the entire process of knowledge discovery, creation, circulation and reuse. Availability of technology as a functional tool is not enough for KM practice. Failure to have a KM policy is a setback in its implementation process. Though at its introductory stage, KM implementation at the UON library seem to be taking place at unstructured and very slow pace.

- KM practice in libraries can lead to a bigger role in the wider academic institution. The focus on potential success factors for the university library should be increased and sustained for the library to realize full benefits of KM. The university library does not have an organizational culture conducive for knowledge creation, sharing, retention and reuse.

- The lack of a clear road map towards the provision of better and faster pinpointed library services like selective dissemination of information and current awareness services can be a source of disaffection among library users. The work experience and academic qualifications among library staff in this study were rated highly. The user satisfaction levels were also impressive. However, serious issues like the dearth of KM professionals, skewed selection for KM training and lack of knowledge sharing culture, which are serious impediments to KM practice abound. These and a myriad of other challenges which have been alluded to in this study deny the library the much deserved competitive edge.

5.3 Recommendations

In reference to the study findings, the following recommendations are made to address the various strategies for implementing KM practices at the UON Library to ensure sustainable competitive edge for the university library.

5.3.1 Knowledge Strategy

The study recommends the development of a Knowledge Management policy which will, among other factors, guide the identification of organizational competencies and competency gaps to facility the acquisition of pertinent skills for Knowledge Management implementation. The policy should also facilitate the projection for future knowledge needs of the library and therefore, make objective and rational decisions accordingly.

5.3.2 Knowledge Creation

A library is a knowledge creating entity. This study recommends continuous creation of valuable knowledge to be utilized in problem solving which can be captured in the form of operational manuals like õAuthority filesö. This can be achieved through committees capitalizing on best practices and lessons learnt. Customer feedback should be emphasized and practiced as a chief source of knowledge about the customer.

5.3.3 Knowledge Sharing

Knowledge sharing is a potential success factor in KM implementation. It is therefore, recommended that an organizational culture which can stimulate knowledge sharing be encouraged to thrive. This can be achieved by motivating the knowledge holders and through discussion committees to enable seamless flow of information in the library.

5.3.4 Knowledge Retention

Before employees who possess unique and valuable knowledge exit from employment, this study recommends that their tacit knowledge be captured for sharing and preservation. This

can be achieved through mentorship programmes, and exit interviews among other avenues. Management should emphasize and practice succession planning to achieve this feat.

5.4 Suggestion for further Research

Based on the findings, the researcher proposes further research to be conducted in the following areas:

- There is need for a comprehensive study of Knowledge Management practices in the University of Nairobi Library.

- The role of incentives in the promotion of knowledge sharing culture in the University of Nairobi Library.

- Knowledge Audit implementation as a tool for measuring performance in the University of Nairobi Library.

5.4 Chapter Summary

This chapter has provided information on the conclusion and recommendations of the findings of the preceding chapter. The study revealed that UON library practices KM. Despite its adoption, not enough has been done regarding the availability of an environment conducive for KM practice as a tool for sustainable competitive advantage. Therefore, the study has made some recommendations for adoption to enhance capacity in KM practice.

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Our Ref: UON/CHSS/FOA/DLIS/303C

Date 28/09/2017

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: RECOMMENDATION FOR NYAMACHE CHARLES – REG NO: C54/81558/2015.

The above named is a bonafide student at the University of Nairobi undertaking a Master of Library and Information Science (MLIS). He is currently in the process of collecting data as part of the requirements for the course.

His topic is **"Implementation of Knowledge Management as a Tool for Sustainable Competitive Advantage at the University of Nairobi Library"**.

Any assistance accorded to him will highly be appreciated.

Regards,
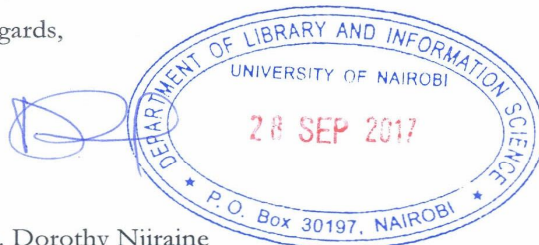
Dr. Dorothy Njiraine
Ag. Chairperson
Department of Library & Information Science (DLIS)

DATA COLLECTION LETTER

Introduction Letter

Charles Ogendi Nyamache

Department of Library and Information Science

University of Nairobi

P.O. Box 30197-00100

Nairobi.

Dear respondent,

Ref: **<u>DATA COLLECTION</u>**

I am a Master of Library and information Science student in the Department of Library and Information Science, University of Nairobi. I am carrying out a research on ð**Implementation of Knowledge Management as a Tool for Sustainable Competitive Advantage at the University of Nairobi Library, Kenya".** The objectives of the study are: to determine the extent to which knowledge management is practiced at the University of Nairobi Library, to determine which Knowledge Management strategies can generate sustainable competitive advantage at the University of Nairobi Library, to evaluate the effectiveness of Knowledge Management as a source of sustainable competitive advantage at the University of Nairobi Library and to identify the challenges encountered in implementing knowledge management strategies for sustainable competitive advantage at University of Nairobi Library. The purpose of this questionnaire is to collect data and information from staff and library users of the University of Nairobi Library. The information and views that you provide are entirely for academic purposes of this research study and shall remain confidential.

Thank you.

Yours faithfully,

Charles O. Nyamache

C54/81558/2015

QUESTIONNAIRE FOR LIBRARY STAFF

Please indicate your response by ticking the provided boxes. For questions that require suggestions or comments, please use the provided space

Section A. Background Information

1. Highest education level attained:

    a) Bachelorøs   ☐

    b) Masters   ☐

    c) PhD   ☐

2. Work experience:

    a) 0-5 years   ☐

    b) 5-10 years   ☐

    c) 10 years and above   ☐

Section B. Knowledge Management (KM) practices at the University of Nairobi Librariy

3. Are you aware of any implementation of Knowledge Management (KM) initiatives in your library? Yes ☐ No ☐

4. To what extent do you agree with the following statements using the Likert scale 5=(strongly agree) 4=(Agree) 3=(I donøt know) 2=(Disagree) 1=(Strongly disagree) Tick appropriately inside the provided box ç

5.

KNOWLEDGE MANAGEMENT (KM) PRACTICE	5	4	3	2	1
Is at its introductory stage					
Is not practiced at all					
It is being practiced though not under the same name					
It is incorporated as a strategic management component of the library					
There are policies supporting KM practices in the institution					

5. To what extent do you agree with the following statements using the Likert scale 5=(strongly agree) 4=(Agree) 3=(I don't know) 2=(Disagree) 1=(Strongly disagree) Tick appropriately inside the provided box ç

KNOWLEDGE MANAGEMENT (KM) PRACTICE STATEMENTS	5	4	3	2	1
KM is what LIS professionals have always done under a different name					
It is difficult to differentiate Information Management and KM					
KM practices can make libraries more relevant to their parent institutions and users					
KM can contribute towards improved value added library services					
KM can enable LIS professionals to change from being service-oriented to value-oriented					
KM can contribute towards improved future prospects of university libraries					
LIS professionals should promote KM initiative					

6. To what extent do you agree with the following statements using the Likert scale 5=(strongly agree) 4=(Agree) 3=(I don't know) 2=(Disagree) 1=(Strongly disagree) ? KM facilitates- Tick appropriately inside the provided box ç

KNOWLEDGE MANAGEMENT (KM) PRACTICE STATEMENTS	5	4	3	2	1
Written KM policy in the library					
Identification of knowledge required for planning					
Identification of personal expertise					
Knowledge mapping within the institution					
Creation of a system to capture tacit knowledge of employees					
Availability of knowledge enabling technology					
Focus on creativity and innovation					
Establishment of knowledge repository					
Strong partnership with other libraries					
A strong culture of knowledge sharing					
Knowledge transfer					
Competitive advantage					

7. Which of the following apply in your institution? Tick where applicable

KNOWLEDGE MANAGEMENT (KM) PRACTICE STATEMENTS	√
There is written KM policy	
Identification of knowledge required for planning	
Identification of personal expertise	
Knowledge mapping within the institution	
Creation of a system to capture tacit knowledge of employees	
Availability of knowledge enabling technology	
Focus on creativity and innovation	
Established knowledge repository	
Strong partnership with other libraries	
A strong culture of knowledge sharing	
Knowledge transfer	
Competitive advantage	

8. How do you rate the importance of the following competencies to KM practices in your institution, at Likert scale 4= (Very important) 3= (Important) 2= (I donøt know) 1= (Unimportant). Tick appropriately inside the provided box ç

KM SKILLS	4	3	2	1
Leadership skills				
Communication				
ICTs compliant				
Change management skills				
Creative thinking				
Information and document management skills				
Teamwork				
Decision making				

9. Implementation of KM in university libraries will lead to the achievement of the following, at Likert scale 3= (agree) 2= (neutral) 1= (disagree) Tick where applicable ç

KM ACHIEVEMENTS	3	2	1
Library goals and objectives efficiently			
New knowledge creation			
Knowledge sharing and transfer			
Accomplishing tasks quickly			
Enhanced job performance among LIS professionals			
Improved overall work performance			

10. In your view, what challenges is the library facing in the implementation and practice of KM? List them below:

a_____

b_____

d_____

APPENDIX IV
QUESTIONNAIRE FOR THE LIBRARY USERS

1. State category of user by ticking in the provided box

   Academic staff ☐

   Postgraduate student ☐

2. To what extent do you agree with the statements below using the Likert scale 5=(strongly agree) 4=(Agree) 3=(I don¢t know) 2=(Disagree) 1=(Strongly disagree)? Tick appropriately ç

USER SATISFACTION STATEMENTS	5	4	3	2	1
The library has all the information you need					
The library staff is always courteous					
The library staff is knowledgeable and able to offer answers to questions					
The library staff is always ready to assist you					
The library staff offers prompt service					
The library operating hours are enough and convenient					
The library staff offers prompt feedback					
The library uses modern technology in information access and retrieval					
The library facilities are user friendly					

3. Which areas would you suggest to the library management to improve on?

Name them;

_____

_____

_____

_____

_____

Thank you

APPENDIX V

INTERVIEW GUIDE FOR LIBRARY TOP MANAGEMENT STAFF

1. What processes have you put in place to enable mentorship by the knowledge/know-how bearers among the staff?

2. What collaborative tools designed to facilitate knowledge exchange and enhanced productivity in your library have you embraced as a department?

3. What challenges are facing during the implementation and practice of knowledge management in your institution?

Thank you