KNOWLEDGE SHARING PRACTICES AMONG LIBRARY STAFF IN IMPROVING SERVICE DELIVERY IN PUBLIC UNIVERSITIES IN KIAMBU COUNTY, KENYA

ONDIEKI JOSEPH LAMECH

Bachelor of Science (Kisii University),

Diploma (Kenya polytechnic),

A THESIS SUBMITTED TO THE BOARD OF POST GRADUATE STUDIES IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF MASTERS IN INFORMATION SCIENCE OF THE
SCHOOL OF INFORMATION SCIENCE AND TECHNOLOGY,
DEPARTMENT OF COMMUNICATION MEDIA AND LIBRARY
INFORMATION SCIENCE KISH UNIVERSITY

DECLARATION AND RECOMMENDATION

This thesis is my original research work and has not been presented for a degree in any		
other University.		
Signature: Date		
Joseph Lamech Ondieki		
MIN12-20358-14		
This thesis has been submitted for examination with our approval as University		
Supervisors.		
Signature: Date:		
Dr. Jane Maina		
Department of Communication Media and Library Information Science		
Kisii University, Kenya		
Signature: Date:		
Dr. Samuel Macharia		
Department of Communication Media and Library Information Science		
Kisii University, Kenya		

PLAGIARISM DECLARATION

Definition of plagiarism

Is academic dishonesty, which involves; taking and using the thoughts, writings, and inventions of another person as one's own.

DECLARATION BY STUDENT

- i. I declare I have read and understood Kisii University Postgraduate Examination Rules and Regulations, and other documents concerning academic dishonesty.
- ii. I do understand that ignorance of these rules and regulations is not an excuse for a violation of the said rules.
- iii. If I have any questions or doubts, I realize that it is my responsibility to keep seeking an answer until I understand.
- iv. I understand I must do my own work.

Name___Joseph Lamech Ondieki_____

v. I also understand that if I commit any act of academic dishonesty like plagiarism, my thesis/project can be assigned a fail grade ("F")

Signature_____

vi. I further understand I may be suspended or expelled from the University for Academic Dishonesty.

Reg. I	NoMIN12/ 20538/14 Date
	DECLARATION BY SUPERVISOR (S)
i.	I/we declare that this thesis/project has been submitted to the plagiarism detection service.
ii.	The thesis/project contains less than 20% of plagiarized work.
iii.	I/we hereby give consent for marking.
1. N	ameDr. Jane Maina Signature
Depar	tment of Communication Media and Library Information Science Date
2. Na	mme_Dr. Samuel Macharia Signature
Depar	tment of Communication Media and Library Information Science Date

iii

REPEAT NAME(S) OF SUPERVISORS AS MAY BE NECESSARY

DECLARATION OF NUMBER OF WORDS FOR MASTERS/PROJECT/PHD. THESIS

Name of Candidate:Joseph Lamech Undieki ADM NO: MIN12-20358-14
FacultyFIST Department Department of Communication Media and Library
Information Science
Thesis Title: Knowledge sharing practices among library staff in improving service delivery in public universities in kiambu county, kenya
I confirm that the word length of:
1) the thesis, including footnotes, is
and, if applicable, 3) the appendices are
I also declare the electronic version is identical to the final, hardbound copy of the thesis and corresponds with those on which the examiners based their recommendation for the award of the degree.
Signed: Date:
I confirm that the thesis submitted by the above-named candidate complies with the relevant word length specified in the School of Postgraduate and Commission of University Education regulations for the Masters and Ph.D. Degrees.
Signed: Email; Janermaina@gmail.com . Tel; 0724 172 268 . Date:
Signed: Email; sammwere@gmail.com Tel; 0724 656 264 Date:

COPYRIGHT

All rights reserved. No part of this thesis may be reproduced in any form, electronic or mechanical means (including photocopying, recording, information storage and retrieval) without prior written permission from the author or Kisii University.

© 2023, Ondieki Joseph Lamech

DEDICATION

This thesis is dedicated to the almighty God for His grace and guidance and to my dear wife Josephine, my children Elizabeth and Hezron for their daily encouragement in improving my life, and to my brothers and sisters for instilling in me the value of prayer, hard work, and persistence in life.

ACKNOWLEDGEMENT

This thesis could not have been possible without the guidance and support of several individuals who, in one way or another, extended their valuable assistance in preparing and completing this study. My sincere gratitude to my supervisors, Dr. Jane Maina, and Dr. Samuel Macharia, for their guidance and support throughout the study.

Great financial support and encouragement were from my beloved wife, Josephine Nyaosi, who also spent much of her time with our Son while I was away conducting the study. Thanks for your patience and understanding. I also appreciate my brothers and sisters' encouragement and moral support throughout this study.

For all those who made this work a success, I say, "thank you very much." May the almighty God bless you?.

ABSTRACT

Evolving information and knowledge has affected all organizations, including academic libraries, making knowledge sharing difficult. Quality service delivery cannot be achieved if there is a lack of consensus on knowledge sharing among LS. This study investigated knowledge-sharing practices among library information science professionals in service delivery in public universities libraries in Kiambu County. The objectives of study were to establish the types of knowledge shared among LS in public university libraries, the methods available for knowledge sharing among LS in Public Universities, the effects of knowledge sharing among LS in Public Universities, the challenges of knowledge sharing among LS in Public Universities and to propose strategies that enhance knowledge sharing among LS in public universities in Kiambu County, Kenya and recommend possible solutions. The study was guided by Social Exchange Theory (SET) and Theory of Reasoned Action (TRA). The study employed a cross-sectional survey research design. The target population for the study was 165 LS in two public Universities in Kiambu County. Data was collected using questionnaires and interview schedules. The study observed that three types of knowledge were in place that is embedded, explicit and tacit knowledge. The methods of KS such as work group, project teams and communities of practice were available but were neutral on informal networks may be because of lack of knowledge. The effects of KS in libraries constructs had a positive effect of library service delivery having influence on planning, management and execution of library services. The findings of study implies that trust, leadership, Social interaction ties, Identification and facilitation factors are challenges to knowledge sharing among LS in Public universities, however Organization Culture issues don't affect the success of knowledge sharing among LS. The study proposed storytelling, performance evaluation, knowledge repositories, job rotation and staff training strategies, which enhance knowledge sharing. The study concluded that knowledge generated was not subsequently shared among staff. The LLS used the acquired knowledge as a weapon to survival and as a way to stay in technical or strategic areas where other LS has no in-depth knowledge. The staff who were nearing retirement age consider their experiences and skills as a weapon to guarantee them an opportunity to earn contracts for continued stay in their positions, denying young professionals employment opportunities.

TABLE OF CONTENTS

DECLARATION AND RECOMMENDATIONii
PLAGIARISM DECLARATIONiii
DECLARATION BY SUPERVISOR (S)iii
DECLARATION OF NUMBER OF WORDS FOR MASTERS/PROJECT/PHD.
THESISiv
COPYRIGHTv
DEDICATIONvi
ACKNOWLEDGEMENTvii
ABSTRACTviii
TABLE OF CONTENTSix
LIST OF TABLESxvii
LIST OF FIGURESxx
LIST OF APPENDICESxxi
ACRONYMS AND ABBREVIATIONSxxii

CHAPTER ONE

	NTRODUCTION	1
	1.1 Background of the Study	1
	1.2 Statement of the Problem	. 14
	1.3 General Objective of the Study	. 16
	1.3.1 Specific Objectives	16
	1.4 Research Questions	. 16
	1.5 Scope of the Study	. 17
	1.6 Significance of the Study	. 18
	1.7 Assumptions of the Study	. 20
	1.8 Limitation of the Study.	. 20
	1.9 Conceptual Framework	. 21
	1.10 Definition Operational of Terms	. 26
C	CHAPTER TWO	
L	ITERATURE REVIEW	.28
	2.1 Theoretical Framework	. 28

2.1.1 Theory of Planned Behavior	28
2.1.2 Social Exchange Theory (SET)	30
2.1.3 Application of Theories in the Study	32
2.2 Types of knowledge shared among LS in public university libraries	33
2.2.1 Tacit Knowledge	33
2.2.2 Explicit Knowledge	36
2.2.3 Embedded Knowledge Sharing	37
2.3 Methods of Knowledge Sharing Practices among LS	38
2.3.1 Work Groups	39
2.3.2 Project Team	40
2.3.3 Strategic Community	40
2.3.4 Learning Community	41
2.3.5 Community of Practice (CoPs)	41
2.3.6 Informal Network	42
2.4 Effects of Knowledge Sharing on Service Delivery	43
2.4.1 Trust	11

2.4.2 Reciprocity	45
2.4.3 Pro-Sharing Norms	45
2.4.4 Identification	46
2.4.5 Image	46
2.4.6 Organizational Reward	47
2.4.7 Knowledge Self-efficacy	47
2.4.8 Codification Effort	48
2.4.9 Loss of Knowledge Power	48
2.4.10 ICT's Enhancing Knowledge Sharing	49
2.5 Challenges of Knowledge Sharing	51
2.5.1 Organizational Factors to Knowledge Sharing	52
2.5.2 Individual Knowledge Sharing Factors	55
2.5.3 Technological Factors to Knowledge Sharing	57
2.6 Proposed strategies for enhance knowledge sharing	59
2.6.1 Knowledge Repositories	59
2.6.2 Performance Evaluation and Appraisal Strategy	60

2.6.3 Storytelling61	L
2.7 Knowledge Gap62	
CHAPTER THREE	
RESEARCH METHODOLOGY65	
3.1 Research Design65	
3.2 Target Population66	
3.3 Sample size and Sampling Techniques67	
3.4 Data Collection Instruments	
3.5 Pilot Study69	
3.5.1 Validity69)
3.5.2 Reliability)
3.6 Reliability test71	
3.7 Data Collection Procedures	
3.8 Data Analysis and Presentation	
2.0 Ethical Consideration	

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION74	
4.1 Introduction	74
4.2 Response Rate	74
4.3 Demographic information of the respondents	75
4.3.1 Designation of the respondents	75
4.3.2 Characteristics of Interviewees	76
4.3.3 Qualification of the Respondents	77
4.3.4 Working Experience of the Respondents	78
4.4 Knowledge Sharing among Library Staff	79
4.5 Types of Knowledge	81
4.5.1 Knowledge sharing forums	82
4.6 Knowledge Sharing Methods	84
4.6.1 Data Capturing methods	86
4.6.2 Methods of acquiring knowledge	87
4.6.3 Knowledge Retention methods	89

4.6.4 Knowledge Skills and Expertise91
4.6.5 Knowledge sharing Channels
4.6.6 Knowledge Sharing improve/Promote service delivery94
4.7 Effects of knowledge sharing on library staff on improve service delivery95
4.8 Challenges of knowledge sharing practices
4.9 Proposed strategies for enhancing knowledge sharing
4.10 Regression
4.11 Regression of the effect's of knowledge sharing model
4.12 Overall regression summary model
4.13 Knowledge sharing Policy
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS119
5.1 Summary of Findings
5.1.1 Types of knowledge shared among LS in public university libraries in Kiambu
County Kenya

5.1.2 Knowledge sharing methods among Library staff in Public Universities in
Kiambu County, Kenya120
5.1.3 The effects of knowledge sharing among LS in Public Universities in Kiambu County, Kenya
5.1.4 Challenges of knowledge sharing by LS in Public Universities in Kiambu County, Kenya
5.1.5 Proposed strategies to enhance knowledge sharing among LS in public universities in Kiambu County, Kenya
5.2 Conclusions
5.3 Recommendations
5.4 Suggestions for Further Research
REFERENCES133
APPENDICES

LIST OF TABLES

Table 3.1: Target Population of Study as per University	67
Table 4.1: Individual University Representation	74
Table 4.2: LS Designation or Position	75
Table 4.3: Characteristics of Interview Participants	76
Table 4.4: Highest academic qualification	77
Table 4.5: Working experience among LS in University library	78
Table 4.6: Staff Understanding on the Term Knowledge Sharing	80
Table 4.7: Types of knowledge sharing encounters	81
Table 4.8: Knowledge sharing forums	83
Table 4.9: Knowledge Sharing methods among LS in Public Universities	84
Table 4.10: Data Capturing methods	86
Table 4.11: Methods of capturing and acquiring knowledge	88
Table 4.12: How Library retains and shares knowledge from staff	90
Table 4.13: Knowledge skills and expertise shared by Library Information	
professionals	91

Table 4.14: Knowledge Sharing Support on service delivery 94
Table 4.15: Knowledge Sharing Channels used in the library 92
Table 4.16: Effects of Knowledge Sharing among LS 96
Table 4.17: How Library deals with the effects of knowledge Sharing to improve service delivery 99
Table 4.18: LS Uunderstanding of Knowledge Sharing 101
Table 4.19: Challenges of knowledge sharing distribution 102
Table 4.20: Proposed strategies for enhancing knowledge sharing
Table 4.21: Knowledge Sharing Strategies Model Summary
Table 4.22: Knowledge Sharing Strategies ANOVA 106
Table 4.23: Knowledge Sharing Strategies Factors Coefficients 107
Table 4.24: Effects of Knowledge Sharing Model Summary' 108
Table 4.25: Effects of Knowledge Sharing ANOVA 109
Table 4.26: Effects of Knowledge Sharing Coefficients 110
Table 4.27: Challenges of Knowledge Model Summary 111
Table 4.28: Challenges of Knowledge ANOVA 112

Table 4.29: Challenges of Knowledge Coefficients	113
Table 4.30: Overall Regression Summary Model	114
Table 4.3: ANOVA	115
Table 4.32: Coefficients ^a	116

LIST OF FIGURES

Figure 1.1:	Conceptual Framework	2	22
-------------	----------------------	---	----

LIST OF APPENDICES

Appendix I: Letter of introduction	151
Appendix II: Questionnaire for Heads of Departments	152
Appendix III: Questionnaire for Library Assistants	161
Appendix IV: Interview guide for University librarian and deputy University librarians	169
Appendix V: Kisii University Introductory Letter to NACOSTI	170
Appendix VI: NACOSTI Research License	171
Appendix XI: Plagiarism Report	172

ACRONYMS AND ABBREVIATIONS

CAS current awareness services

CoPs Communities of practices

DIS Document imaging systems

FPPTI Forum Perpustakaan Perguruan Tinggi Indonesia

ICT Information Communication Technology

ICT Information Communication Technology

IT Information Technology.

JKUAT Jomo Kenyatta University of Agriculture and Technology

KENET Kenya education network

KM Knowledge sharing

KS Knowledge sharing

KSF knowledge-sharing forums

LS Library Staff

MAREN Malawi Academic and Research Network

NACOSTI National Commission of Science Technology and Innovation

NuNet Nigerian University Network

PLC Professional Learning Community

SDI Selective dissemination of information

SPSS Statistical Package for Social Sciences.

TK Technological knowledge

TK Tacit Knowledge

UCAD University Cheikh Anta Diop of Dakar

CHAPTER ONE

INTRODUCTION

This chapter includes the study's history, problem description, objectives, and research questions; it also presents the assumptions, justification, limitations, and significance of the study.

1.1 Background of the Study

Staff members at universities including their libraries change information resources for users' use through teaching, research, and other services. Universities including their bookstores are social organisations. Moreover, there is an increasing quantity of transactional data in databases, knowledge ingrained in procedures and paperwork, and both explicit and implicit information held within employees' minds. Information and knowledge concentrated in one staff member or process eventually remain in the hands of multi-functional groups with short lifespans, adjusting quickly to new systems and locations, as staff turnover grows and change in position more regularly. The requirement to manage knowledge has grown significantly in order to assure effectiveness due to changes and an increase in organisational information. Librarians in university libraries may be extremely important to the sharing of knowledge (Akparobore, 2015).

Making organisational and personal information available to other employees of the company is referred to as knowledge sharing (Sandhu & Suppiah, 2011). Senior employees within the organisation that effectively facilitate knowledge exchange among junior staff members see an improvement in productivity. According to Aboelmaged

(2012), when library management shares their knowledge, staff members will exchange information and knowledge more widely, ensuring uniformity in operational processes and an improvement in productivity.

The transmission, distribution, and exchange of expertise, experience, abilities, and important information from one person to other employees within an organisation is sometimes referred to as knowledge sharing. Sharing of information can be official or informal, taking place through written letters, in-person interactions, or the use of electronic knowledge systems. The manner in which someone distributes their expertise with coworkers, team members, or other organisational units might vary depending on who is giving the knowledge and under what circumstances. These may affect the decision to share information or not (Šajeva, 2014).

Innovation of an organization has identified information technology and knowledge management (Del Giudice & Della Peruta, 2016) to be important factors, where different states' achievements or disappointments is raising economic growth through technological improvement. Knowledge sharing among library staff produce new experience that contributes and facilitates synergy, collective learning and creativity, accelerating innovation as well as the creation of shared values and standards (Singh et al., 2018).

According to Wong (2005), hiring "minds" rather than "hands" and the need to leverage the value of knowledge are two major factors pushing businesses and organisations towards more knowledge-intensive areas. Knowledge sharing has also received a lot of attention from the academic and business communities. Employees who are eager to

provide their thoughts based on what they expect as well as guided by their opinions and experiences from years of service may be influenced by the way management treats them. Knowledge sharing is said to be encouraged in an atmosphere that is marked by openness, tolerance, trust, justice, and an incentive scheme (Del Giudice & Della Peruta, 2016).

When assessing an organization's capacity for creativity, data pertaining to innovation and sharing of knowledge points to earlier research on knowledge sharing, establishing connections between social resources, tacit knowledge sharing, and knowledge reciprocity. Even yet, Akhavan and Hosseini (2016) have included knowledge exchange and quality into their discussion of information sharing, social capital, and innovation potential. Examining the combined effects of social resources, implicit information sharing, knowledge quality, and reciprocity in enhancing an organization's capacity for innovation is consistent with analysing the role that knowledge sharing plays in innovation capability.

Akhavan, and Hosseini, (2016), recommends knowledge sharing activities that focused on facilitating knowledge sharing rather than transmitting Northern knowledge to the South are likely to prove to be more successful. According to TitiAmayah (2013), developing and maintaining knowledge-sharing techniques among staff members both within and outside of an organisation can boost productivity, creativity, and inventions by streamlining decision-making. Communication of knowledge is important processes through which knowledge shared to determine whether organizational staff learning occurs and, whether knowledge- sharing practices are taking place.

Knowledge sharing at UK university libraries showed that while failing to assign roles to librarians was a barrier to knowledge sharing, trust was a significant element in knowledge sharing (Fullwood, Rowley & McLean, 2018). Mallasi and Ainin (2015) discovered that KS was significantly impacted by trust, self-efficacy, and the joy of helping others.

According to Earney and Martins (2009), switching jobs between library workers at Cardiff University within the United Kingdom enhanced their enthusiasm to share technical skill information across various library service areas. According to LS, restructuring allows employees to have a broader view of the library's overall operations, which calls for greater bravery and enthusiasm to take on new challenges.

Prey et al. (2016) observes knowledge sharing among staff of high institutions of learning in Germany, knowledge management involves all activities related to the capture, use and sharing of knowledge. The growing complexity, interdisciplinary and inter- university co-operation internal knowledge generation is under pressure and must be shared smoothly.

Knowledge sharing is vital improving service deliver, but Ranjbarfard, (2016), it is not the knowledge of the library staff, which is of strategic importance, it is libraries service delivery in building, integrating and utilizing its intellectual capital. Over the years, particularly from the organizations library perspective the understanding of knowledge has considerably changed. In order for knowledge to develop, it needs to be shared within the University libraries. Knowledge sharing between library management

and library staff has been seen building a strong organization (library) and more competitive in improving service delivery.

The success of libraries, according to Biranvand's (2015) study on the obstacles to knowledge sharing among information technology experts employed by public libraries in Fars Province, Iran, depends on how resourcefully they are able to obtain, share, store, and retrieve data within their coworkers at several levels. According to Biranvand (2015), the success of any library section is dependent on information sharing efforts that encompass a variety of library concepts, such as management, behavioural, economic, and strategic tactics. The company may identify resources for knowledge and then invest in them thanks to information sharing across employees and other internal groups (Wang & Noe, 2010). The primary cause of the knowledge sharing system's inability to effectively share knowledge is managers' ignorance of the variables influencing information sharing (Jen & Wen, 2009).

Libraries and information centres are important departments inside organisations that require knowledge exchange in their day-to-day operations to stay current with information available in the market. Libraries are seen by organisations as the best archive centres for knowledge because they provide their customers with high-quality information in a timely manner. If librarians emphasise their specialised information level, these organisations will need to build knowledge exchange aspects. When libraries offer services to other users and organisations and create an appropriate environment for information exchange among their own personnel, they fulfil their duty as knowledge disseminators (Biranvand, 2015).

Many different information-sharing methodologies are built on the fundamentals of knowledge sharing. Knowledge sharing practises can be facilitated by identifying issues that impact knowledge sharing. Among the organisations responsible with this responsibility are libraries and information centres. In the course of their everyday work, LS employed by public libraries in the Fars Province of Iran need to share knowledge.

In any expanding organisation, knowledge creation is largely dependent on information sharing awareness as well as sharing behaviour. Sharing knowledge is essential since it enhances decision-making abilities, performance, and job effectiveness (Deka & Subaveerapandiyan, 2021). The majority of library staff members at the different South Asian academic institutions participate in knowledge-sharing activities and have a good awareness of the importance of sharing knowledge through a variety of channels, including meetings, emails, group mail, the internet, social media sites like Facebook, Twitter, and YouTube, and databases used by the libraries.

When it comes to information management and sharing, social networking sites, online chat programmes, and instant messaging are widely accepted among library workers. Additionally, library employees were urged to take part in knowledge-sharing events including regular webinars and seminars as well as academic communication. Among the difficulties LS faces include an unfavourable organisational culture, inadequate ICT infrastructures, a deficiency of incentives and reward systems, a lack of commitment from organisational leadership, and constrained funds. (Subaveerapandiyan & Deka, 2021).

There are hardly many organisations in Indonesia that have formally adopted knowledge sharing, despite the fact that information sharing is closely connected with it. PT PLN/electricity Indonesia, which has already put knowledge sharing into practise (Hakim, 2013). These organisations prioritise making money. Nevertheless, information sharing initiatives in non-profit organisations are still uncommon, particularly in libraries. Despite this, the upper echelons of many companies are leading the way in information sharing for a variety of reasons, including fostering innovation in the development of novel services and products (Irdiani, 2012). But in order to improve knowledge production, libraries are urged by the worldwide financial and information eras to embrace knowledge sharing. Like other organisations, libraries may expedite the generation and reuse of knowledge through knowledge sharing, as seen by their consistently expanding services and products.

LS are knowledgeable and constantly producing new information, which is produced when employees exchange ideas with one another. Certain libraries in Surabaya have formalised knowledge sharing, thus the practise is now covered by the regulations governing library administration (Nove & Puspitasari, 2013). Thus far, the Indonesia Universities Library Forum (FPPTI) Forum Perpustakaan Perguruan Tinggi Indonesia has begun a knowledge-sharing initiative among university librarians and the community of practise. Established in 2,000, the FPPTI is backed through the National Library and serves as a resource for university libraries to learn from one another and cultivate a culture of knowledge exchange within their libraries.

Daniel (2015) studied the methods used by library information science workers at public university libraries throughout the South-South region of Nigeria to share knowledge.

He learned that Nigeria had been active in a number of areas, leading to the establishment of a national network for education and research. All of these initiatives, including NuNet, aim to create and leverage ICT to promote institutional collaboration between the academic and administrative communities. Workers everywhere agree that one of the easiest and most efficient ways to learn is through information exchange. Sharing knowledge makes it easier for staff members to ask one another for assistance with studies, which ultimately helps to achieve the goals of group learning. Sharing information and learning are intimately related. Understanding the procedure is a necessary step in communicating, reflecting, and gaining knowledge.

Any university library needs employees with knowledge of technology for communication and information, automation, networking, internet, administration, cataloguing, acquisition, abstracting, indexing, publishing, marketing products and services, seminars, workshops, policies, interlibrary loan, staffing, knowledge sharing, and database management, among other things, in order for it to operate and learn its functions effectively (Etimo, 2010). Nigeria has participated in several initiatives to establish a nationwide network for research and education, according to Daniel (2015). Using ICT to promote institutional collaboration in information exchange across the organization's academic and administrative groups is the goal of NuNet.

According to Etimo (2010), the Cameroonian interuniversity network demonstrates the government's commitment to provide universities in Cameroon with state-of-the-art facilities. Major academic sites needed bandwidth, therefore Malawi Academic as well as Research Network (MAREN) was created. (Domenech, 2010). The UCAD information technology system connects the university's faculties and schools

throughout Senegal (Daniel, 2015). The Kenyan Education Network (KENET) is a project by Tarus, Gichoya, and Muumbo (2015) to create a fast, dependable, and long-lasting IP network enabling interconnectivity among educational institutions in Kenya.

From a Kenyan viewpoint, Rotich and Munge (2007) note that resource sharing is an umbrella term for cooperation, coordination, interlibrary loans, cooperative acquisitions, cooperative storage, and cooperative processing in the framework of librarianship. Sharing of information resources is a broad term that includes networking, systems, and collaboration in information services. Resource sharing may be viewed as a word for establishing inter-institutional partnerships for the advantage of users in a profession that is commonly defined as shifting from materials-oriented to client-oriented, according to Rotich and Muge (2007), referencing Odini's (1991).

Kenyan information professionals came to the realisation that they would never be able to obtain all the data resources needed by their institutions and that the information explosion would make it impossible for one institution to collect all the information that is created. Thus, they must communicate and exchange information with one another (Rotich & Muge, 2007).

The County of Kiambu Specialised expertise is necessary for information transfer among coffee growers (Kabita, 2021). Access to the availability of pertinent knowledge are key factors in determining the venture's success in terms of production quality and quantity. Institutions that do scientific research provide this knowledge. This research looked into the knowledge-sharing practises between Kenyan coffee growers and the Coffee Research Centre in Kiambu County. The results have shown that a variety of

strategies are now used by the institution and farmers to share knowledge. Nevertheless, a number of obstacles prevent these knowledge-sharing techniques from being used effectively. Because the Coffee Research Centre shares significantly more information than it gets from farmers, the existing symmetry of the knowledge flow is uneven, making it difficult for farmers to take full use of the knowledge the institute produces.

Employees that share knowledge are better able to solve issues, pick up new skills, and comprehend more. Employees may grow and learn from one another as well as from fresh information. Employees with knowledge-sharing skills are more effective and have a higher chance of staying employed than those without (Yang, 2004). Librarians create a shared understanding between themselves by exchanging ideas, opinions, experiences, and expertise.

Enhancing employees' abilities and knowledge is the most efficient way to use knowledge sharing practises, since this will raise workers' output and efficiency (Peariasamy, 2009). The advantage of information sharing in organisations benefits those with little expertise. By exchanging knowledge, librarians have improved their efficiency within the library organisation and been able to benefit from the lessons and methods of others.

When knowledge is shared, collaborative learning produces better learning results for all participants and fosters cooperative engagement more than individualistic trade. Effective knowledge acquisition requires the sharing of personal knowledge. Personal knowledge is probably not going to make much of an influence on performance unless it is shared with others. Shared knowledge is essential for librarians to maintain a smooth

flow of information. Without it, knowledge cannot freely flow, which would result in data hoarding (Yang, 2004). Since librarians are the primary force behind educational progress and the development of information, a great deal of attention must be placed on preparing them to play a significant part in the knowledge society. Thus, one of the most important issues addressing librarians in educational institutions is how to effectively share this resource (Aranda & Fernandez, 2002).

Remarkably little empirical research provides insight into the character of personal expertise in Nigerian universities along with the ways in which academics communicate it in their work environments, despite the significance of the role that individual knowledge plays and the necessity for this information to be shared successfully. According to these trends, the academic staff's poor attitude towards the ideal of sharing knowledge with one another and their lack of awareness of the importance of knowledge sharing in the academic community have severely hampered knowledge sharing among academics in Nigerian universities (Lawal, Agboola, Aderibigbe, Owolabi & Bakare, 2014).

Universities all throughout the world rely heavily on library information resources to fulfil their core missions of research, teaching, and learning. This has made it necessary for library employees to provide information services in an efficient manner. According to Adeeko and Adetimirin (2021), a university library's ability to serve users and fulfil its founding objectives will depend on how successfully its staff provides information services. This holds true regardless of how well-stocked the library is. Delivering information services to patrons is the culmination of all the work done in libraries by staff members with the ultimate goal of meeting their information requirements. A

library's provision of information services to its patrons with the aim of satisfying their varied and varied demands is known as informational service delivery (Kuteyi, 2012). The success of these services, which include document delivery, internet-based providing services, current understanding services (CAS), reference services, referral programmes, and selective transmission of information (SDI), is largely dependent on the tactics and approaches used by library staff.

According to Mutilib et al. (2020), university libraries must develop new concepts that not only concentrate on information acquisition but also on innovative techniques for staff members to share knowledge in order to provide services that are successful as the demand for information services grows and becomes more widespread. Embracing the idea of knowledge sharing might make it easier for libraries to provide information services. According to Hau, Kim, and Lee (2016), knowledge may be divided into two categories: explicit and tacit. Explicit information is defined as facts and is often found in books and articles, whereas implicit information depends on an individual's experience and expertise. Nevertheless, if shared appropriately and sufficiently, both can improve the provision of information services in libraries (CARLA, 2012).

Since sharing information is a relatively new idea, libraries have not yet completely embraced it. Mosha, Holmner, and Penzhorn (2015) conducted a study on librarians at Nelson Mandela University that revealed that there was a low level of knowledge sharing practises in the library. Libraries are becoming more aware of the advantages of knowledge sharing practises and are developing ways to implement knowledge offering in the library.

Because information is beneficial to both organisations and society as a whole, there is a great deal of interest in this field in modern society. It all comes down to sharing and acquiring knowledge, where people may benefit from one another's experiences by exchanging knowledge. However, the librarianship has made an effort to determine how librarians may encourage practises of information sharing among themselves by utilising social media. Sharing knowledge on social media platforms among librarians is crucial since it provides them with original ideas for improving client service. Since shared understanding is the foundation for every library's success, knowledge sharing practises bring out the best in librarians.

When a technological and organised infrastructure is established in a library, knowledge transfer can occur (Seonghee & Boryung, 2008). According to Harinarayana and Raju (2010), libraries may utilise social media to share information, encourage user interaction, and offer well-organized resources. Additionally, by sharing their knowledge online, librarians may utilise social media to encourage users to develop new library services (Casey & Savastinuk, 2010).

Today's libraries are experimenting with novel approaches to improve service delivery, and knowledge-sharing techniques hold promise for enhancing library services via the use of information and communication technology. By offering electronic library resources to complement physical libraries, libraries have grown more and more important. The world of interaction has been overtaken by technology, and libraries are seizing the chance to interact with people in an electronic setting. According to Mayega (2008), service delivery is the process of providing access to information resources through library policies and procedures for in-person usage, interlibrary loans, and

circulation. The term "service delivery" also refers to the way in which providers and customers interact: the supplier provides a service, such as information, and the client both gains or loses value from the service (Tetra Images, 2015).

Technology has improved library services, but most libraries still don't offer them to their full potential. Akpoiroro and Okon (2015) observed students' satisfaction alongside the provision of services in federally accredited colleges in South-South Nigeria and found that this was largely because the institutions didn't have enough information technology facilities. Technological advancement made possible by the internet has led to improvements in customer satisfaction, efficiency, and quality service delivery. It has also altered and will continue to alter how clients (Users) engage with service organisations (Gabriel et al., 2016).

1.2 Statement of the Problem

Technology has advanced as a result of the significant evolution of library practises. Numerous methods have been used to repackage information, and new requirements need redesigning service delivery to satisfy evolving customer expectations. This trend necessitates the ability to exchange knowledge among library information science specialists [LS] in order to stay up to date with an evolving field in information management. However, due to a lack of collaboration, a sharing culture, and limited knowledge sharing skills, library professionals continue to have difficulty integrating KM strategies into their work processes. As a result, knowledge is largely inaccessible due to limited avenues for knowledge sharing (Roknuzzaman & Umemoto, 2009).

The knowledge that library information technology professionals generate and collect while performing their jobs in order to achieve their mandates for providing services is facilitated by the quantity of training that is provided by the operations of libraries (Mosala-Bryant, & Hoskins, 2017). The high rate of resignations, retirements, promotions, illness, and death among library information technology professionals has a significant impact on the ability of staff members to impart the knowledge they have gained through organisational training and other capacity-building initiatives. It also decreases the pool of possible mentors for newly hired staff members.

Public universities libraries are faced with many challenges, emanating from requisite expertise; where individual expertise tend to retain knowledge for themselves, high staff turnover; resignation for better jobs without training the followers and limited integration of knowledge sharing in organization culture (Mutula & Jacobs, 2010). The result of this loss of knowledge in the library is an inability to pick the brains of experts, which results in repeated blunders and unlearned lessons. In order to provide solutions that would lead to effective knowledge sharing and enhance service delivery, this study aims to assess the impact of knowledge sharing practises between library information science workers in public higher education institutions in Kiambu County, Kenya. Employees from many departments had to change how they interacted and worked together.

1.3 General Objective of the Study

The study's objective was to find out how library staff (LS) knowledge-sharing practises affected the quality of services provided at Public universities in Kenya's Kiambu County.

1.3.1 Specific Objectives

- i. To establish the types of knowledge shared among LS at Kenya's Kiambu County public university library.
- ii. To determine the possible techniques for information exchange between LS in Public Universities in Kiambu County, Kenya.
- iii. To assess the effects of knowledge sharing among LS in Public Universities in Kiambu County, Kenya.
- iv. To examine the challenges of knowledge sharing among LS in Public Universities in Kiambu County, Kenya.
- v. To propose strategies to enhance knowledge sharing among LS Among Kenya's state universities located in Kiambu County.

1.4 Research Questions

i. What kinds of information are exchanged between LS in Kiambu County, Kenya's public university libraries?

- ii. Which methods are available for knowledge sharing practices among LS in Public Universities in Kiambu County, Kenya?
- iii. What are the effects of knowledge sharing among LS in Public Universities in Kiambu County, Kenya?
- iv. What are the Challenges of knowledge sharing among LS in Public Universities in Kiambu County, Kenya?
- V. Which strategies do you propose that enhance knowledge sharing among LS in public universities in Kiambu County, Kenya.

1.5 Scope of the Study

The study focused on all public universities libraries in Kiambu, there are six public university libraries in Kiambu County, namely University of Nairobi Kikuyu campus, Lower Kabete and Upper Kabete campuses, Mama Ngina University College, Kenyatta University and Jomo Kenyatta University of Agriculture and Technology. However the study focused on two Public University Libraries in Kiambu County of Kenya, namely Kenyatta University and Jomo Kenyatta University of Agriculture and Technology. The choice of the two universities libraries in Kiambu County was motivated by the fact that they are the only two Public Universities libraries whose main campus libraries are in Kiambu, which have well established structures and have undergone the transformation process proposed by the Commission of University Education (CUE). The merger made clear the many racial groupings and institutional cultures, which differed from those of any other public university in Kenya. Because of this variety, the context was ideal for researching how library staff members share information when providing services at

public universities throughout Kiambu County. The audience of the study was all the university library staff who consider knowledge as one of the greatest assets in their possession.

1.6 Significance of the Study

The results of the study will be extremely helpful in developing management practises policies that will improve knowledge administration as a means of raising employee performance via service delivery.

The study will be helpful to librarians and library management since it will let them know how much knowledge exchange is practised within the library and what procedures need to be followed in order to provide better staff service. Librarians are in a unique position to understand existing knowledge-sharing platforms and how to integrate them with library policy to boost productivity and improve service quality. The study would help university library administration find knowledge-sharing gaps and provide space for new ideas and creative expression.

The research results were crucial in assisting the LS in Kansas in building a competent workforce, which allowed them to locate resources and other areas of competence inside the library. In order to help university libraries take use of their intellectual assets more affordably and get a competitive edge, the LS was in a position to provide direction and guidance on the methods of gathering and correctly coding tacit information. Through the identification and resolution of issues preventing the transfer of implicit expertise, this study assisted LS and served as a model for university libraries in developing and

implementing policies and procedures that facilitate the seamless exchange of information, skills, and experiences between LS.

Effective KS among the users made guaranteed that everyone had access to relevant, high-quality information when it was needed at the university libraries as a whole. In order to gain increased prestige, prominence, and more access to information, improved teamwork and knowledge exchange were commonplace among many LS, which motivated them to improve operations to their communities. To recognise their increased duties, LS also acquired new competencies and abilities necessary in the age of data and expertise era. The users gained from improved LS interactions and experiences as well as an atmosphere of expertise sharing, which aided in the overall expansion of new information.

Contribution of Information Researchers that specialise in human resource growth and leadership might use the results of the research on knowledge sharing as a reference in the future. This study would serve as a resource. Knowledge sharing is a crucial component of human resource management, thus future academics should investigate this topic more or as it stands today.

The goal of the study was to provide guidance for policy choices about knowledge sharing, resource planning, and capacity building in order to improve knowledge sharing in Kiambu County's public university libraries. This study was noteworthy because it demonstrated how knowledge sharing is used in academic libraries and offered an alternate strategy for enhancing public library service delivery by utilising the existing expertise of the libraries.

1.7 Assumptions of the Study

This study was based on the premise that, despite the fact that public schools libraries within Kiambu County produce enormous amounts of knowledge, the lack the platforms necessary for LS to share that knowledge and improve performance, that there are differences in the perspectives and attitudes of the study universities' faculty towards knowledge sharing. The study also made the assumption that information sharing procedures and standards had been established to direct library staff members. If knowledge sharing tactics are used, information sharing between LS in university settings would improve and perform better. The study also makes the premise that the physical infrastructure of information communication technology at public university libraries is underdeveloped, making it difficult for staff to collaborate, build connections, and form partnerships to effectively exchange knowledge. Informing professionals about the value of knowledge sharing is important, yet formal cooperative ventures are difficult to start because of inadequate information.

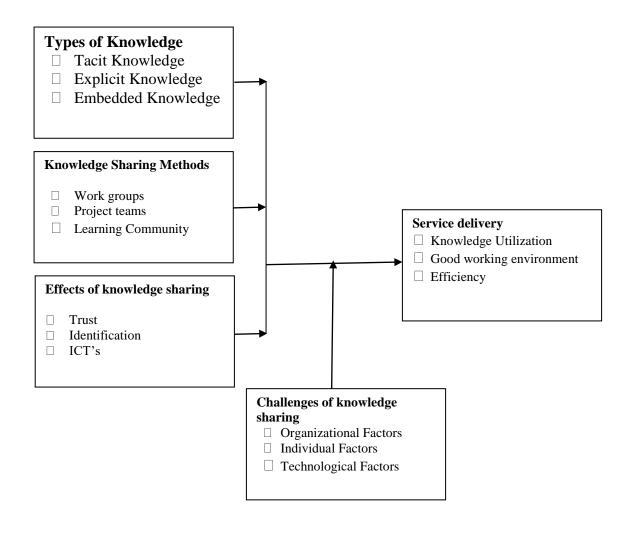
1.8 Limitation of the Study.

Research limits, as defined by Kirkwood and Price (2013), are possible variables that are outside the investigator's control. Few local standards were confirmed by the minimal literature on KS that was available in Kenyan university libraries for the purpose of reviewing literature, establishing the foundation for the current study. The study's characteristics and viewpoints were limited to those of library employees. The study was limited since the researcher was unable to interview all of the target university librarians including deputy university librarians because certain LS were not available for

interviews. The study was limited two public Universities in Kiambu, because there main libraries which have well established structures are in Kiambu, to represent all Public academic libraries in Kenya for comparison purposes and even the larger geographical region.

1.9 Conceptual Framework

Conceptual framework in the figure 1.1 below illustrates the relationship between variables on the study.



Independent Variable Moderating Variables Dependent Variables

Figure 1.1: Conceptual Framework

Knowledge Sharing Practices; Knowledge sharing among employees enables them to share their insight and experiences to efficiently and effectively provide information and services to their clients. This can be measured using the following constructs; Work Groups, Project Teams and Learning Community. Members of work groups are individuals who report under the same manager, have comparable job responsibilities, and are allocated comparable tasks based on their division. Project teams are transitory employees in the context of knowledge sharing; if there are no mechanisms in place to collect and disseminate the information they possess, any new knowledge acquired may be lost once the team dissolves. A learning community is a continuous, reflective, collaborative, inclusive, learning-oriented, and growth-promoting group of individuals who share and critically examine their practise. Institutions are coming to the realisation that in order to promote knowledge sharing, they require people-focused initiatives that allow members to engage both physically and online. The sharing facilitates the understanding on how a various social structure in institution provides a way for knowledge sharing processes to take place.

Consequences of knowledge sharing: although knowledge is derived from human intellect, it also exists in routines, practises, systems, software, and institutional norms. The exchange of knowledge among employees, such as through ICTs, trust, and identification, is what drives the flow of knowledge. Trust has an impact on collaborative efficiency, when there is trusting and equal climate it facilitates knowledge sharing further and Inter departmental or sectional trust also facilitates knowledge sharing behavior by enhancing the quality and quantity of information for sharing. Identification as the examination between a supervisor and co-workers would be a different in that one

needs to be felt in terms of workgroup identity and subsequently acts as a member of the group in determining employee effort. ICT has become a key facilitator of knowledge exchange among professionals with multi-dimensional benefits. ICT-enabled platforms are great motivators for knowledge sharing when compared to the traditional methods. ICT enhance knowledge sharing by lowering temporal and spatial barriers between knowledge workers and improving access to information about knowledge, by making knowledge-sharing simple and cost-effective. Staff are afraid that they will lose knowledge power in the Institution if they share with others.

Challenges of knowledge sharing, Challenges of knowledge sharing in organizations include organizational factors, personal knowledge sharing characteristics, and technological aspects to knowledge sharing. The organizational barriers to sharing knowledge are based on the corporate environment and conditions.

Since information is freely shared both inside and outside of organisational boundaries, the issue of sharing knowledge within the organisation has scarcely received any attention. Individuals carry information as a resource, and managing the flow of information is just as important as managing the conduct of knowledge holders. Organisations utilising ICT for sharing information face a major hurdle in the form of individual knowledge sharing obstacles. This is explained by the intricate human element present in organisations, which renders it extremely vulnerable to changes in the surrounding environment, such as those pertaining to technology or organisational regulations. Numerous studies focus on people's opinions about the usage of technology in a setting where knowledge is shared.

Technological Factors to Knowledge Sharing

The installation of ICT's own obstacles to knowledge sharing is an absolute certainty when ICT is adopted with the intention of enhancing knowledge sharing. It makes sense for organisations to take technology into account when utilising ICT for knowledge exchange.

Mismatches between chosen technology and employees' needs occur when it does not precisely match what is needed or the employees' typical working methods. In Keyes (2008). Technology compatibility refers to how newly acquired technology for information exchange should work with the existing system, which serves a different function. Sharing of information will be hampered by incompatibility. It is nearly hard to find an integrating system that works for all functional areas inside global organisations.

Information exchange; Provision of services Sharing expertise may enhance and encourage the provision of services by increasing the ability of various carders. Future librarians benefit equally from the knowledge and expertise that is transferred to them, since it fosters consistency in working relationships and simple access to information.

Institutional culture

Institutional culture; this are shared values, beliefs and practices of the staff in the Institutional, as reflected in its mission, vision and shared goals. Staff interact with each other and with the surrounding institutional culture and by representing a determining factor to the sharing of tacit knowledge.

Information management systems (IMS) in libraries have facilitated running of various

library operations in an automated way, replacing all traditional functions. This has

enabled libraries to efficiently record maintenance, eliminate backlogs, and generating

desired reports rapidly. IMS are used in libraries to automate routine functions such as

acquisition, cataloging, patron management, circulation and development of statistical

reports.

Learning inside the organisation: Employers who have placed a high priority on learning

and growth have observed gains in worker productivity, profitability, and job

satisfaction. The efficacy of organisational knowledge across various departments and

groups of Institution workers determines the productivity and performance of the

organisation. This is more about matching processes to circumstances than it is about

making decisions, and organisational actions depend on the past. Routines are not so

much founded in expectations of the future as they are on readings of the past.

1.10 Definition Operational of Terms

A network: Is a set of actors or nodes that is connected by ties? Actors may be

individuals, teams, organizations, etc.

Dichotomous: Is the absence or presence of a draw between players in a network

Information: Information is data that have been organized and arranged in a

meaningful way

Knowledge: Analyzed and processed information placed in context, it becomes

knowledge. Knowledge is a fluid mix of outlined experience, values, background

26

information, and expert understanding that provides a framework for evaluating and incorporating new experiences and information. Kebede (2010) observes knowledge as information with experience, insight and expertise.

Knowledge sharing: Knowledge sharing involves the management of creation, acquisition, storing, and giving out of organizational information to achieve organizational goals (Leung, 2012). Also, Okonedo and Popoola (2012) defined knowledge sharing as the activity of disseminating information, values and ideas about the perception between two parties to agree or disagree. Knowledge sharing enables employees to share their insight and experiences for fast, efficient and effective provision of information services to their clients.

Institutional culture: In the study this concept is used to encamps all levels of the organization as the individuals, groups and society as a whole, the way they perceive information sharing, and a set of skills transfer and information cycle continuum (Foss, Husted & Michailova, 2010).

Library: A place or room where acquisition, processing, organization, storage and retrieval of information materials takes place.

Sharing: The exchange of ideas between two persons of the same interest

Service Delivery: Performing duties for a person, organization or community

Social structure: This are patterned or regularized aspects of the relationships that exist among staff in an organization.

CHAPTER TWO

LITERATURE REVIEW

The theoretical underpinnings of the study are presented in this chapter, which also highlights the gaps in the research by reviewing a few conceptual works pertaining to important variables.

2.1 Theoretical Framework

King, Chung and Haney (2008) describes a theory as a set of principles or statements developed to explain incidences especially one that has been continually tested or is widely accepted and can be used to make expectations about other naturally occurring phenomenon. A theoretical framework provides the researcher the mirror to view the world. This study anchored on Social exchange theory (SET) and theory of planned behavior (TPB).

2.1.1 Theory of Planned Behavior

The Theory of Reasoned Action, or TRA, was the basis for Ajzen and Fischbein's 1988 development of the Theory for Planned Behaviour (TPB). A motivational/behavioral theory, the theory of planned behaviour was created to forecast and comprehend human behaviour based on the process of individual decision-making (Xiao, 2008). The TPB consists of five constructs, with behaviour being the sixth construct that is prompted by the first five (actual behavioural control, subjective norms, perceived behavioural control, intents, and attitude). Xiao expounds that an individual attitude is used to explain an individual's attitude towards engaging in a behavior. King, Chung, and Haney (2008) argue that in mentoring, the employee's attitude towards involvement in a

mentoring relationship is composed of the belief regarding the outcome of their involvement in the relationship.

TPB has faced criticism on a number of fronts when compared to the most important theories. Huff (2011) makes the point that a mentor should be willing to impart newly acquired information as well as the appropriate mindset. It is said that the idea of attitude influences goal, therefore is a prediction of actual behaviour. Goh and Hooper (2009) contend, however, that empirical evaluations of the models regularly employ a design based on correlation, which demonstrates that a shift in one variable results in a modification in another, while it is not immediately clear which way causation runs. Because of its crucial component of simplicity, the theory on planned behaviour is recognised for being a comprehensive explanation of behaviour.

External variables aside, critics question the sufficiency of the TPB constructs as universal influencers on behavior and argue in favor of the addition of independent constructs as determinants of intention that are parallel to the original predictor variables. Researchers by O'Dell and Hubert, (2011) they used the TPB to study knowledge-sharing behavior through mentoring. Recent empirical findings also give credence to the usefulness of the TPB for studying knowledge-sharing behavior in organizations (Abdullah, Selamat, Jaafar, Abdullah & Sura, 2008). Rivera-Vazquez, Fournier and Flores, (2009) agree that there is considerable evidence that empirical studies have benefitted from extending the framework of the TPB to fit their respective situational contexts, despite the universal application of the original TPB.

This theory is valuable in assisting academic libraries in predicting LS behavior toward the services they offer, hence meeting them halfway by tailoring the services to the user's projected preferences. In essence, it enables libraries to fulfil the user's needs, capture and retain loyalty, thus giving academic libraries a competitive advantage that it so requires in the current highly inexpensive business environment and winning the self-confidence of the users.

2.1.2 Social Exchange Theory (SET)

The Social Exchange Theory (SET) was first published in 1958 by sociologist George Homans, who also published "Social Behaviour as Exchange." Social exchange, according to Jonsson (2008), is the "exchange of activity, intangible or tangible, and more or less gratifying or costly, between no fewer than two persons." George Homans described it as thus. Several fundamental presumptions of social exchange theory are based on this understanding of human social interactions. Because staff members are typically logical, they compute the costs and advantages of social

According to Sandhu, Jain, and Ahmad (2011), people who interact logically want to maximise the advantages of SET they receive from such circumstances, particularly when it comes to taking care of their fundamental requirements. People who engage in exchange practises reap gains from their social relationships. In addition to meeting people's needs, these social interaction patterns also place limitations on how those needs may be eventually met, claim Jonsson and Tell (2013).

LS can discover partnerships and interactions in knowledge sharing forums that help them achieve their information requirements, but they can also encounter behaviours from other LS that are driven by their own needs being met (Lee, Gillespie, Mann & Wearing, 2010). In a social structure that is naturally competitive, SET also implies that employees have goals. It has been established and criticised that the SET cannot be tested. One important measure of a theory is that it is testable and it can be proven false. The central concepts of social exchange theory (costs and rewards) are not clearly defined because Social exchange in between is difficult. Minbaeva (2013) explains, it becomes difficult to make an operational difference between what staff value, what they identify as rewarding, and how they behave because both terms are defined in terms of each other (Nonaka & Krogh, 2009).

The conceptualization of employees is painted as the second problem area of Social Exchange Theory. Employees are viewed as rational calculators, coming up with mathematical equations to represent their social life. According to Duke, Goodman, Treadway and Breland, (2009) they argue that staff do not always calculate the costs and rewards to be realized when engaging in a behavior or pursuing a relationship. The most explored and applied facet of social exchange theory is knowledge sharing since, in organizations, KS is essential, and socializing is significant if learning has to take place (Salimderhaven & Harzing, 2009). The success of knowledge sharing forums is entrenched in how freely the members interact.

In organizations, social exchanges may involve interactions between two parties that produce personal obligations, appreciation and trust (Paulin & Suneson, 2012). Knowledge sharing in organizations is been attributed to how well the employees are motivated to share knowledge. The success of knowledge-sharing forums (KSF) has also

been associated with employees' rewards for sharing knowledge (Paulin & Suneson, 2012).

While numerous characteristics of social exchange exist, the most significant is reciprocity, whereby positive and fair exchanges between two parties result in good behaviors and attitudes (Paulin & Suneson, 2012). Some of these good behaviors in an organization can be knowledge-sharing forums which give an organization a competitive advantage through shared knowledge.

2.1.3 Application of Theories in the Study

The Theory of Planned Behavior (TPB) is instrumental in helping LS appreciate individual decision-making by creating a culture that enhances knowledge sharing and thereby succeeds at offering innovative, satisfying services to the library staff and users they are intended to serve. In social exchange theory, staff are alleged involved in an interaction with others, expecting some rewards such as respect, reputation, and tangible incentives. Some staff seek to maximize their benefits and minimize costs by engaging in social relationships with other colleagues by sharing their knowledge. The theory explains how communication, interaction, and knowledge sharing help one get something in return, thus developing a good relationship with one another. At the same time, employees in dispersed web communities look at factors that deter and facilitate knowledge sharing. The social factors such as trust, status, job security, and tangible rewards were essential predictors of knowledge sharing.

Tiwana and Bush (2001) acknowledge that staff strives to interact and share knowledge with the aim of rewards such as support, status, job security, and respect. However, staff

share their knowledge because they desire to being acknowledged by experts and colleagues. In the workplace, socializing is key to providing an environment of trust and willingness to share knowledge, especially if KSF has to be successful (Simonin & Ozsomer, 2009). KSFs will lead to improved performance if the LS has positive exchanges between themselves and the supervisors (Sluss, Klimchak & Holmes, 2008). The theory informs how LS socialization helps build trust and willingness to share knowledge amongst themselves

2.2 Types of knowledge shared among LS in public university libraries

There are different forms knowledge to be able to differentiate between various types of knowledge it is an essential element for knowledge management. On the side of types of knowledge, the famous nomenclature (Nonaka, I994) is a leading authority who categorizes knowledge as either tacit or explicit.

2.2.1 Tacit Knowledge

Explicit expertise, which is stated as information that is shared with others, is contrasted with tacit knowledge, as defined by Nonaka and Toyama (2015). If we translate one kind of information into another, that new knowledge will be produced. Because it is situation-specific and intimate in nature, information derived from subjective experience that cannot be articulated in words, phrases, numbers, or formulas is known as implicit knowledge (Nonaka & Takeuchi, 1995). In addition to technical skills like expertise and craft, cognitive skills like beliefs, mental models, pictures, and intuition are also covered (Brown & Duguid 1998). It is difficult to express because it is firmly anchored in action, dedication, and engagement. Since implicit information is the most useful type of

knowledge, it is more likely to result in breakthroughs (Wellman, 2009). The inability to innovate and maintain competitiveness is closely correlated with a lack of attention to tacit knowledge (Gamble & Blackwell, 2001). People's minds include implicit information, which is concealed and unwritten (Maravilhas & Martins, 2019). Unlike explicit information, which can be transferred to other people easily, implicit knowledge is acquired by experience and interaction with others.

Experience, knowledge, and abilities that are hard to put into words, record, and preserve are what define implicit knowledge (Haldin-Herrgard, 2000). According to McLever et al. (2013), implicit information is unobservable, challenging to teach, encode, and difficult to extract from its environment. Khan and Ali (2016). considers tacit knowledge to be information shared during job training, communities of practise, mentorship, and platforms for knowledge sharing such as conferences, workshops, seminars, and knowledge fairs. shared tacit knowledge within a group or between LS. Alsharo et al. (2017) argue that the fundamental aspect of information sheltered in people's minds can enable groups or individual involvement. Knowledge sharing can been embraced by LS that desire to have a cutting edge in their areas of operation (Gabbard, 2018).

Sharing tacit knowledge requires a conducive culture in knowledge sharing, by allowing LS to locate and translate knowledge elements, while facilitating the sharing with other users and professional communities. Świgoń, (2017), observes tacit knowledge to be very important to organizations and individuals if shared properly. Tacit knowledge becomes a competitive advantage in organization where individual ideas and expertise can positively add to social, economic and academic values. Tacit knowledge is a

valuable source of knowledge, leading to advances in the organization (Ali & Khan, 2016). Exchanged of knowledge from one LS to another as the basis of networking (Świgoń, 2017), acknowledges that tacit knowledge gained.

Davenport and Prusak (2001) observes that LS share tacit knowledge through socialization. This takes different forms like informal networks, daily interaction between LS within work environments by spanning functions and hierarchies. Tacit knowledge acquired through long experience resulting in expertise in an area when assisting users. This knowledge is personal, in accessible, only understood by the individual and is shared during meetings and conferences.

Many institutions are investing on Information communication technology (ICT) because it is changing the ways used to share knowledge (Majeed & Khan, 2019). ICT systems support interaction between LS who are not in the same location by sharing knowledge, while some tools are designed to capture unstructured thoughts and ideas. They provide support in the socialization of tacit knowledge by supporting varied, formal and informal forms of communication, they can help tacit knowledge sharing by supporting teams, projects, communities, etc. functions by attaching notes to documents or video conferencing for work environments over long distances to some degree. As libraries grow in size and decentralize the use of their services, ICT can be user friendly and necessary to enhance access to information. The retention of knowledge and expertise held by staff, especially when long-term employees leave is one of the biggest challenges in KM (Agarwal & Islam, 2014). Davenport and Prusak (1998) in their seminal work on the nature of knowledge within organizations, observed that the knowledge shared by an individual is only recognized when that staff is gone.

The value and impact of knowledge held by staff is still resonate even with the tremendous steps into technology growth. The biggest percentage of organizational knowledge resides in the minds of staff in the form of technical knowledge, it has negative consequences when there is failure to share this critical knowledge. Technical knowledge sharing among librarians will drive future efforts to capture and transfer this knowledge before it is lost and a better understanding of the nature of knowledge shared.

2.2.2 Explicit Knowledge

Clearly stated, explicit information is rational, objective information that can be articulated in words, phrases, and numbers. According to Brown and Duguid (1998), theoretical methods, problem-solving techniques, manuals, and databases are more readily transferable than tacit knowledge, which is also known as "know-what." Bukowitz and Williams (1999) emphasise the explicit information supplied about success by emphasising the user's capacity to identify his or her own demands. The user needs to be aware of the knowledge existing and the supplier encouraged to make use of directories and maps. Access to knowledge and procedure where LS are considered as main areas of building-up of knowledge sharing system (Gamble & Blackwell, 2001).

Explicit knowledge may also be easily communicated in rule-driven or object-based contexts as it is officially stated using symbols. In object-based learning, explicit information is expressed as strings of characters (words and numbers) and may be found in software code, computer databases, technical drawings, tools, pictures, voice recordings, and films (Dentakos, 2020). Explicit knowledge is said to as rule-based when it is arranged according to rules or working processes. By exchanging knowledge

about working processes in libraries, LS is guaranteed to adhere to correct protocols while managing work in their assigned sections. Clear knowledge may offer direction in the event that consumers need to be instructed in any important action if it is thoroughly recorded in the information science services booklets.

In all stages of the knowledge sharing process ICT is useful in information management as well as data and text mining. Information management systems update, distribute, tag, and manage information. The ICT's comprise of a wide range of tasks like web information management and document management systems. The ICT's import, create documents and multimedia material, classify key users and their roles, allocate roles and duties to different instances of content categories and define workflow responsibilities. Information management systems use various advanced indexing, searching, and retrieval instruments to facilitate explicit knowledge sharing. Jackson *et al.* (2003) acknowledge that explicit knowledge management systems are quite transparent and therefore easy to reproduce thus they are not the source of continuous long-term competitive advantage.

2.2.3 Embedded Knowledge Sharing

Organisational procedures, regulations, and technology are all interwoven with knowledge. According to Olohan (2017), embedded knowledge may be found at the social, organisational, or routine level. can be observed in the relationships between formal organisational processes, emerging routines, people's roles, and technology, to name a few. According to Hatshwayo (2017), this kind of knowledge is often found in buildings, routines, procedures, goods, and artefacts. Library management initiatives

have been implemented to formalise specific valuable routines utilised inside the organisation through the usage of both tacit and explicit knowledge. For embedded knowledge to be efficient in terms of norms and regulations—which offer guidance and can aid in the standardisation of operational procedures—they must be properly adhered to. According to Gamble and Blackwell (2001), embedded knowledge is the knowledge that may be encountered in procedures, goods, culture, practises, and artefacts. The library management initiative to formalize some favorable embedded knowledge routines, as the organization uses and applies the other types of knowledge.

The use of Scenario planning, is the practice of creating a set of situations and imagining on how these situations might unfold by drawing upon the perceptions of experts and the organization's knowledge asserts (Gamble & Blackwell, 2001) (Retrieved from http://www. valuebasedmanagement.net/methods_scenario_planning.html). This knowledge can theoretically, shared by simply testing the effects of designed features sharing knowledge from one staff to another. Staff responsible can receive embedded knowledge in either explicit or partially explicit form. Information technology can be used to support knowledge mapping functions in the design of simulations, experiments, product design and provide displaying tools used in reverse engineering of information. Procedures and guidelines are stored and retrieved using embedded knowledge repository.

2.3 Methods of Knowledge Sharing Practices among LS

Libraries are beginning to realise that in order to facilitate the exchange of tacit knowledge, they require staff-focused strategies that allow employees to connect online (Rambur & Saenz, 2007). Blankenship as well as Ruona (2007) note that a range of social dynamics seen in libraries provide an atmosphere conducive to knowledge-sharing activities. According to Bari et al. (2020), knowledge sharing refers to an individual's readiness to impart concepts, insights, information, procedures, and formulae to other library employees.

As organizations libraries grow, also the social structures within the organizations libraries themselves grow. Hatch (1997), observes that organizations libraries that are not designed using social structures, one will emerge from the work activities and associations of the staff within the organization library. Staff should understand all types of social structures used in an organization library to provide a lens through which to examine their dynamic nature in relation to knowledge-sharing activities.

2.3.1 Work Groups

These are teams of LS collaborating regularly in one area to accomplish shared objectives (Schermerhorn, Hunt, & Osborn, 1994). These are the sections that are typically found in library structures that are functional for organisations. They are where occupations are grouped based on how similar their job functions seem to be (Hatch, 1997). They are made up of employees who answer to the same boss and have similar work responsibilities and functions. According to Cummings (2004), work groups may exhibit more physical diversity when their members are dispersed among several library sections, representing various library roles, answering to various section librarians, and working in various sections. They are formed based on a formalized library structure, working together until when re-organization and new services come-up.

2.3.2 Project Team

Schermerhorn *et al.* (1994) agree that project teams are comprise of members with corresponding skills working together to achieve a common aim under which they are answerable. They are cross functional and organized to complete a specific project in a given period of time and their members are selected by library management (Wenger & Snyder, 2000). After the project is over, the team members separate. Although project teams are popular in a variety of organisational structures, they are most prevalent in those that have a matrix structure, which combines the flexibility and efficiency of multidivisional and functional structures (Hatch, 1997). Fong (2003) looks at knowledge sharing as collaborating with additional expertise processes in the generation and incorporation of knowledge for the project team's success. Due to the temporary in nature, new knowledge shared with other staff may be lost when the team disbands thus falling of project in knowledge sharing, if there are no systems in place to capture and disperse the knowledge that reside within the project team (Ruuska & Vartiainen, 2005).

2.3.3 Strategic Community

The strategic communities' small pool of specialists in the organisation library share interests and shared knowledge linked to their respective fields of expertise. These groups were created by the library administration to fulfil certain objectives related to information exchange. Strategic communities differ from Communities of Practise (CoPs) in that they are supposed to contribute to the organisation library via the creation of creative solutions and best practises (Ruuska & Vartiainen, 2005).

2.3.4 Learning Community

Professional learning communities (PLCs), as defined by the learning community structure and education literature, are a type of learning community that offer a space for knowledge exchange and learning. According to the international consensus, a PLC is a "group of staff sharing expertise and critically interrogating their practise in a continuing, contemplative, collaborative, inclusive, learning-oriented along with growth-promoting way." However, Stoll, Bolam, McMahon, Wallace, and Thomas (2006) note that there is no universal definition for PLCs.

Their focus is on professional development in the setting of libraries. PLCs are staff members who have come together with a common professional vision, clear objective, and need for professional development, according to Blankenship and Ruona's 2007 study. The PLCs differ in terms of membership, size, and authorised and approved tasks by the library administration, such as staff coaching, reflective discussion, and document analysis, which is a one-way knowledge exchange.

2.3.5 Community of Practice (CoPs)

Communities of practise (Cops) are official and informal staff groups that voluntarily exchange goals and pertinent information as a means of communication for knowledge sharing. Communities of practise are a highly successful means of facilitating knowledge exchange among staff members, according to Cabrera and Cabrera (2005). Information and communication technologies, including blogs, are used by the majority of communities of practise for information and knowledge exchange. According to Ramirez (2007), weblogs used in communities of practise facilitate the exchange of

information in a certain field of study by allowing members to share ideas, experiences, and questions. Atwood (2009), however, cautions employees against sharing unprofessional or harmful content online and advises them not to be overly aggressive.

As participants, they favour in-person meetings and video conferences among other knowledge-sharing platforms. Because the material they wanted was so confidential, LS expressed an interest in utilising Cops as an information exchange technique because it allowed them to choose a list of staff members they were interested in and create their own networks of practise.

CoP, as stated by Wenger, McDermott, and Snyder (2002), routinely communicate to expand their knowledge and skill in this field and share a concern, a set of challenges, and enthusiasm for a topic. Their fundamental idea is that they are passionate about the same things, and they communicate to exchange information. Wenger (1999) emphasises how CoP combines mutuality, shared repertory, and collaborative effort to provide staff members the chance to grow professionally. grasp how staff members engage within the community to continuously learn from one another and develop their sharing repertoire requires a grasp of this notion of knowledge sharing.

2.3.6 Informal Network

Social networks have human behaviour integrated in them that let people and staff share knowledge alongside additional information resources. A group of actors with linkages between them is called a network (Borgatti & Foster, 2003). Employees can be people, groups, or companies. There are many different ways to describe the relationships that unite the personnel, such as directed or undirected, appreciated or dichotomous. Links

that are either directed or undirected indicate whether knowledge is moving in both ways or just one. Networks may be found in various kinds of organisations, including highly structured hierarchical structures, matrix structures, and network structures. Advice systems, trust systems, and communication networks, for instance, transcend formal divisions and function boundaries.

Work is done in libraries through informal networks, which can take many different shapes and serve a variety of functions (Krackhardt & Hanson, 1993). Informal networks serve as a conduit for information generation, exchange, and acquisition. Networks are created by the connections that employees have with one another. However, networking based on professional as well as personal ties that exist independent of other kinds of social structures, both inside and between libraries, provide the foundation from which additional social structures may grow (Ruuska & Vartiainen, 2005).

2.4 Effects of Knowledge Sharing on Service Delivery

Bock et al. (2005) observe knowledge in the academic institution is the most valuable asset and the base of the organizations library competitive edge. Knowledge existing on organization procedures, routines, norms, systems, software and practices originates in individual staff intelligence, which are difficult to imitate (Davenport & Prusak, 1998). Knowledge sharing behaviors of the employees depends on the flow of knowledge among themselves. Staff are afraid that they share knowledge with others, they will lose knowledge power in their place of work and line of operation (Davenport, 2001). Knowledge sharing has become the core business of management practice since

Knowledge sharing became an instrument of managers in 1990s. Even though many factors affecting knowledge sharing have been discussed in academic journals, with many case studies provide an integrative review of empirical literature, on factors affecting knowledge contribution in order to contribute to the development of knowledge sharing (Hung & Chuang, 2009) as the objective of this study.

The library management commitment to transform the library or organisation into knowledge sharing unit is limited since no rewards provided to motivate staff to become more productive. Insufficient financial resources and poor IT infrastructure to ensure effective integration of knowledge sharing does not make matters any calmer (Nazim & Mukherjee, 2012). Limited knowledge sharing in public universities and their libraries is due to lack of knowledge sharing policies and strategies that contribute towards knowledge sharing.

Losing knowledge through retirements or resignations. As they leave, loss of efficiency, which in turn leads to cost-cutting strategies, by adding more staff is not a viable solution. Martins and Martins, (2011) agree that when knowledgeable senior staff leave an organization library, they move with them valuable knowledge that afforded the organization a competitive advantage, extensive personal relationships with decision-makers in major customer organizations thus affecting library operations.

2.4.1 Trust

According to Hung and Chuang 2009, citing Kankanhalli *et al.* (2005) suggest that collaborative efficiency in the organization has an impact on the degree of trust. While trust among LS in the library is built on the fairness of the organization. He and Wei,

(2009) opines that trusting and equal climate facilitate knowledge sharing further and Inter-organization trust facilitates knowledge sharing conduct. Li and Lin (2006) examined trust in supply chain partner as enhances the quality and quantity of information sharing behavior in supply chain management. Trust in knowledge sharing is as one of the key contextual factors affecting knowledge sharing success.

2.4.2 Reciprocity

Reciprocity has been discussed as a significant issue affecting knowledge sharing lin, (2007). It is "a behavioral response to perceived kindness and unkindness, where kindness comprises both distributional fairness as well as fairness intentions. From the knowledge-sharing perspective, reciprocity is a fair mutual knowledge exchange behavior Chiu, Hsu, and Wang, (2006). a reciprocal relationship is the degree to which an individual believes that he or she can improve mutual relationships with others through knowledge sharing, Bock; Zmud; kim, and lee, (2005). In the online network environment, Wasko and Faraj (2005) examine the effect of reciprocity on knowledge sharing and confirm a positive influence.

2.4.3 Pro-Sharing Norms

A norm is a degree of consensus in the social system that LS individuals are involved (Coleman, 1990). Norms moderate human's behavior in accordance with the expectations of the group (Kankanhalli *et al.*, 2005). Pro-sharing norms represent norms that facilitate knowledge sharing. Starbuck (1992) examines the norms of teamwork to enhance the climate of knowledge sharing, while, Pro-sharing norms are key contextual factors affecting knowledge contribution (He & Wei, 2009).

2.4.4 Identification

Identification is based on the interests of LS individual's interests merge with organization's interests (Johnson *et al.*, 1999). When identification is strong, the cost of sharing knowledge may not be a concern because the concern of organizational outcomes may dominate the behavior of knowledge sharing. Identification is a key contextual factor affecting knowledge contribution (Hooff & Huysman, 2009). Social identification, one force of social influence, has gained more attention in the workplace for group effectiveness such as cohesiveness, loyalty or productivity Tohidinia and Mosakhani (2010) Chiu *et al.* (2006) state that social identification may foster knowledge sharing in a community, since identification acts as a driver, influencing the motivation to exchange knowledge.

Cooper and Thatcher, (2010) observes identification as examination between a supervisor and co-workers would be a different in that one needs to be felt or defined in terms of workgroup identity and subsequently acts as a member of the group in determining employee effort. These distinctiveness element position one as important in the current study of knowledge sharing.

2.4.5 Image

Image, this are self-concepts where organised set of perceptions and beliefs about a person or a collection of beliefs about oneself (LS). Advancement is an extrinsic benefit for LS engaged in knowledge sharing, making it a valuable asset for LS individuals to maintain their status in the organization (Jones *et al.*, 2006). The enhancement of reputation is a crucial factor for people to engage in knowledge sharing (He & Wei,

2009). When LS is willing to engage in activities that would promote their image as compared to monetary value, thus they normally engage in activities that will provide themselves with positive self-esteem. Gray, (2001) observes currently, that LS's, insight or expertise is highly respected as a resource, whereby social rewards such as status, respect and feelings of authorization created.

2.4.6 Organizational Reward

Staff present a negative attitude towards knowledge sharing belief that knowledge sharing is an activity that should be rewarded. Providing rewards to staff will not encourage staff to share their tacit knowledge, instead the rewards may negatively affect the attitude towards knowledge sharing. Knowledge sharing occurs when LS perceive incentives of knowledge contribution exceeds costs required for knowledge sharing (Kelly & Thibaut, 1978). Appropriate rewards or incentive mechanisms like bonus or career advancement, motivates LS to share their knowledge (He and Wei, 2009).

2.4.7 Knowledge Self-efficacy

Kankanhalli et al. (2005) acknowledges that people confident of their expertise would contribute to the knowledge repository, by sharing expertise useful to the organization enhancing a sense of self-worth, thus increasing knowledge self-efficacy. When professional expertise improves work efficiency and increase productivity, they are more inclined to share knowledge with others (Kulkarni *et al.*, 2007). Wipawayangkool and Teng (2016) found that workers with higher knowledge self-efficacy are more likely to share knowledge not only voluntarily but also when requested by others.

Cho, Chen, and Chung (2010) acknowledges that knowledge self-efficacy affects sharing attitude and intention, whereby people do not share due to the lack of knowledge self-efficacy. Myers (2012) observes self-efficacy as directing us to a bunch of challenging targets and not giving up on them thus has a positive and significant impact towards knowledge sharing among LS.

2.4.8 Codification Effort

It takes time and effort to transfer tacit knowledge into explicit knowledge which is understood by others. Such effort is codification effort of knowledge contributor. Kankanhalli et al. (2005) demonstrate that the time required for coding knowledge is an opportunity cost. When using complex codification process, people will be unwilling to contribute their knowledge (He & Wei, 2009). Personalization enables tacit knowledge sharing through informal person-to-person interactions and socializations, while codification promotes people-to-documents approach by reusing explicit knowledge stored in a system (Boh, 2008). Personalization as the degree to which one desires person-to-person approach in sharing knowledge, and preference for codification as the extent to which one prefers people-to-document approach in sharing knowledge. Davison, Ou, and Martinsons (2013) found out that expert employees prefer interactive instruments for exchanging extremely contextualized tacit knowledge.

2.4.9 Loss of Knowledge Power

When knowledge contributors share their unique knowledge with others, they will retain less proprietary knowledge. Kankanhalli *et al.* (2005) posit that LS are afraid that they will lose power position in the organization if they contribute unique knowledge to

others which may make them better than the originators of knowledge. Loss of power due to knowledge contribution is a barrier to knowledge sharing among LS (Davenport & Prusak, 1998). On that note KS can be viewed as a threat to job security and could negative impact on staff perceptions bearing in mind that knowledge is power.

2.4.10 ICT's Enhancing Knowledge Sharing

Knowledge sharing among LS and other professionals have been greatly enhanced in recent times by information and communication technologies (ICTs) (Nove & Puspitasari, 2013). ICT tools such as intranets, WhatsApp, emails, online professional blogs as well as other emerging social networking platforms are enjoying increasing utilization by librarians for collaboration and knowledge exchange (Nove & Puspitasari, 2013). ICT has become a key facilitator of knowledge exchange among professionals with multi-dimensional benefits. Contemporary ICT-enabled platforms are great motivators for knowledge sharing when compared to the traditional methods; ICT can enhance knowledge sharing by lowering temporal and spatial barriers between knowledge workers and improving access to information about knowledge (Hendriks, 1999). Besides overcoming the barriers of time and space, ICT can make knowledge sharing simple and cost-effective.

ICT's positive influence on knowledge sharing is enhancement of the knowledge sharing process. The introduction of technology in knowledge sharing influences other organizational and individual barriers, for example, ICT influencing employee motivation for knowledge sharing (Hendriks, 1999).

Hendriks (1999), in his work has identified four major goals for using ICT in knowledge sharing and lead to following knowledge sharing process enhancements: ICT also seen as facilitating access to information bases, storing data using for example document imaging systems (DIS). This, according to Hendriks (1999), can help groups of people to identify each other's documents without having to read them or memorize them.

ICT may be with the motive of improving the processes associated with knowledge sharing. By this, Hendriks (1999) means either ICT supporting the knowledge sharing process or ICT partially taking over the knowledge sharing. ICT can enhance meta-knowledge (knowledge about knowledge) in knowledge sharing. This essentially means locating elements or sources that have knowledge required to address issues or situations.

Mohamed, Stankosky and Murray (2006) observes that proper use of IT can accelerate knowledge sharing capabilities timely and space dimensions. While it is exciting to influence ICT for knowledge sharing, does not mean that ICT can solve all problems in knowledge sharing. However, it is a major misconception that the use of ICT is some kind of ultimate magic bullet for all knowledge sharing problems (Han & Anantatmula, 2007) and perhaps all organizational problems extending beyond knowledge sharing. It is organizations dilemma to continue to believe that their ICT investments alone can resolve all knowledge sharing issues, however this often turns out to be a disappointment. There are inciting benefits and convenience of ICT, such as, enhancement of operations, time and cost reductions, decision intelligence etc, however ICT in itself cannot be declared absolute.

Shahid and Alamgir (2011) acknowledges that a mere investment in ICT will not guarantee overcoming knowledge sharing problems without considering the completely organizational perspective in ICT context. ICT has its shortcomings relating to knowledge issues such as retrieving tacit knowledge, double-loop learning, cognitive abilities etc, especially when compared to human brain (Mohamed, Stankosky & Murray, 2006). The issues are extensively discussed but more importantly, this leads us to an important finding in ICT enabled knowledge sharing implementation. Use of ICT in knowledge sharing should not be viewed as an absolute solution rather as implied by researchers such as Hendriks (1999) and Mohamed, Stankosky and Murray (2006) in their conceptual framework, ICT should be viewed as having role of a facilitator in knowledge sharing.

The limitations of ICT, introduces the real risk of throwing away the knowledge with the LS. The risks associated with ICT can be seen as rivers to be crossed in order to connect the individual stretches of land that symbolize the advantages of using ICT (Hendriks, 2001). A balanced approach is required, which does not over-emphasize as ICT or knowledge sharing issues over one another. The researcher advocates knowledge sharing barriers in ICT context by understanding which barriers ICT can reduce and if developed will influence on organization to be better reaped and studied.

2.5 Challenges of Knowledge Sharing

There are three levels of Challenges of knowledge sharing among LS in libraries namely organizational factors to knowledge sharing, individual knowledge sharing factors, and technological factors to knowledge sharing.

2.5.1 Organizational Factors to Knowledge Sharing

With regards to knowledge sharing, the concepts of organizational and behavioral change management in the field of organizational behavior, which is an interdisciplinary study of managing people within the workplace (Kinicki & Kreitner, 2006). This raises the need to investigate organizational and behavioral change management practices within the context of the AEC industry, which has been noted to pose several challenges to organizational change adoption due to the industry's project-based nature (Lines, Sullivan, & Wiezel, 2016)), suggesting a strong link of ICT to knowledge sharing at organizational positions

The problem of sharing knowledge within the organization is hardly mentioned in the organizational theory. This could be because that knowledge is freely flowing within the organization and outside the organizational boundary. Another reason could be that knowledge as a resource is embedded into individuals and to control the flow of knowledge is as critical as controlling the behavior of the knowledge possessors. (Cristensen, 2007). Studies have shown that, barriers to sharing knowledge within organization based on the corporate environment and conditions (Riege, 2005). The challenges include;

Inadequate technology investment means organization's willingness to invest in technology for knowledge sharing (Han & Anantatmula, 2007) causing libraries not to be adequately equipped with KS enabling technologies. The cost of sharing knowledge, capturing, categorizing and setting access rights for knowledge sharing (Happel et al., 2007), this has limited the staff to share their wide experience's.

Training of knowledge sharing processes, staff learn new technologies relevant KMS and knowledge sharing in general (Han & Anantatmula, 2007). The success of KS projects is dependent on adequate staff training on KS processes, e.g. training in methods of capturing, organizing, disseminating, and use of the new technology. Lack of priority of knowledge retention, where highly skilled employees are mobile in the business world because they know their value in the job market. When they leave the organization, their knowledge and know how skills follow them. So, lack of priority of knowledge retention from highly skilled employees can produce knowledge sharing barrier (Stauffer, 1999).

Poor leadership communication about knowledge sharing benefits and values of knowledge sharing which are properly communicated among the employees, but because of poor leadership approach and management communication, knowledge-sharing benefits are unknown to the knowledge possessors and thus barrier occurs to knowledge sharing. (Riege, 2005). Depending on the structure of authority or direction of flow of knowledge (Top-down or bottom-up) or restrictions of work areas, knowledge sharing can be obstacle. (Michailova & Husted, 2003).

Space lack within the organization for properly sharing or even generating new knowledge. The available facilities help employees in sharing knowledge (Han & Anantatmula, 2007). The Budget is a two-way issue, on one hand, the librarians are embracing KS to respond to financial problem by delivering more services with less. Then again, because of budgetary limitations libraries are not well equipped with critical infrastructure for KS, e.g. new technology, training, incentives and implementation.

Unmanageable unit size refers to when the size of information is too large and unmanageable to facilitate the proper sharing practices.

The budget plan is a two-way issue. On one hand, bookkeepers are embracing KS to take care of the money related issues by delivering more with less. Then again, because of budgetary limitations libraries are not well fitted with basic framework for KS, for example innovation, preparing and motivating forces. Unmanageable unit size, when the size of data is enormous it gets unmanageable to encourage the best possible sharing practices (Connelly & Kelloway, 2003).

Inadequate senior library management support, motivation and rewards system; Inadequate management support, motivation to knowledge sharing can reduce the practice. For example, transparent reward system within the organization. Knowledge possessors should be motivated for volunteer participation of knowledge sharing practice. (Happel et al., 2007). Success of KS project influenced by on strong collaboration and partnership within the library such as between the senior and junior LS, students, IT staff units and external collaboration exists in a strong partnership with other libraries or allied corporate organizations. Often such collaborations are lacking and effects obstacle to knowledge sharing success. Roknuzzaman and Umemoto (2009) observes that junior staffs are often reluctant to share their knowledge and ideas with the seniors, as they feel that there will be no benefit of the situation. Traditionally librarians operated manually or with minimal computer operations. The IT departments is a new phenomenon. With the emergence improved technology and the digital age knowledge economy has evolved. Today librarians have to work hand-in hand with IT experts.

Lack of supportive resource, like proper infrastructure to support efficient knowledge sharing practices and opportunities (Reige, 2005). High competition among internal

units, High external or internal competitions among the functional areas and among subsidiaries led by confliction goals and competing interest can surface knowledge sharing barrier. (Michailova & Husted, 2003). This best lies between processing section and IT section, whereby the section limit

Non-supportive organizational structure and culture, Han and Anantatmula, (2007) observed that mostly the organizational culture and structure often was not supportive to knowledge sharing in the organization. As times went by there emerged a centralized model in which M & E is handed to one manager or expert (Park & Lee, 2014). This was the first step in any KS initiative where a small handful of individuals make most of the decisions in a company. However most academic libraries lack a centralized policy for KS initiatives. There is a challenge in knowledge sharing policy in libraries that hinder the management and sharing of knowledge in the Public Universities Libraries (Roknuzzaman & Umemoto, 2009). Mphahlele (2010) observes that no attempts have been made by the libraries in drafting a library framework for knowledge sharing where the area of KM has not received the attention it deserves.

2.5.2 Individual Knowledge Sharing Factors

Individual knowledge sharing barriers pose a significant challenge to organizations using ICT for knowledge sharing. This can be attributed to the complex human factor involved in organizations which makes it highly susceptible to environmental changes such as organizational policies or use of technology. Many studies emphasize on individual's views on use of technology in knowledge sharing environment. Riege (2005) notes that individual concerns "just about every book written on KS comments

about the distribution of the right knowledge from the right people to the right people at the right time is one of the biggest challenges in knowledge sharing".

Poor communication skills both (verbal and written) can hinder social network inside and outside the organization, their personal ability to communicate with others can be vital in knowledge sharing (Meyer, 2002). Employee's age and gender, difference in level of education, experience level play vital role in knowledge sharing practice (Sveiby & Simons, 2002). Lack of time to share knowledge, however, librarians are aware of the benefit of knowledge sharing, time constrains always makes it impossible for them to practice knowledge sharing. Lack of time to identify colleagues in need of specific knowledge or interested in sharing knowledge. Managers believe that if the employees are not always working then they are not productive. This could be an obstacle for time constrains for knowledge sharing. (Riege, 2005).

Intellectual test refer to oversee tacit knowledge and pull the important data from the flooding fountain of data is another large test in the academic libraries. Developing the correct culture and condition for gathering, sharing and making information is an impediment to information appropriation in scholastic libraries. Especially, librarians are about gathering and sharing tacit knowledge embedded within the experience, ability, and instinct of the library staff. Fear of job security among employees believe that if they can keep the knowledge inside and provide good output, they could be promoted. On the other hand, if someone else learns from him and provide better output then that could jeopardize job security. (Happel *et al.*, 2007). Some employees tend to receive credit for their own work and thus could be an obstacle for sharing knowledge.

Low awareness of possessed knowledge by LS is uncertain about the value of knowledge they are possessing. This could hinder them to volunteer in knowledge sharing (Riege, 2005). The Librarians are intolerant to employees making mistakes and

learning from it, instead of capturing and evaluating past mistakes, managers more like to cover up the mistakes or blame someone making learning from mistakes is overlooked (Michailova & Husted, 2003). Dominance in sharing explicit over tacit knowledge, this is because tacit knowledge is difficult to transfer as compared to explicit knowledge, employees practice more on explicit knowledge sharing over tacit knowledge. (Riege, 2005).

Asserting own position authority in some organizations, the University Librarians are reluctant to work with heads of department and learn from them as they believe that there is a difference in experience (Michailova & Husted, 2003). Trust among the knowledge possessors plays an important role in knowledge sharing. Doubting the quality of knowledge and the faithfulness of the knowledge career can hinder efficient knowledge sharing (Reige, 2005). Another challenge is LS unwillingness to change and trust fellow colleagues because of fear to be outshined by others Munyai (2011) stresses the importance of knowledge sharing policies to facilitate the collection, development and dissemination of knowledge within the University libraries which is not considered because of fear of job loose.

2.5.3 Technological Factors to Knowledge Sharing

When ICT was introduced as a motive to enhance knowledge sharing, an inevitable certainty was introduction of ICT's own barriers in knowledge sharing. It is rational for organizations to consider technological factors when using ICT for sharing knowledge.

Mismatches with employees need, when the adopted technology does not closely fit the requirements or the normal way of working of employees. (Keyes, 2008). Compatibility

of Technology, newly adopted technology for knowledge sharing should fit with the current system that has a different purpose of use. Lack of compatibility will raise barriers to knowledge sharing. There should be an- integrating system that will suit functional areas within global organizations is almost impossible. (Keyes, 2008). Difficulties arise in generating contents for knowledge warehouses, especially in the beginning. Mandatory self-archiving policies found to be a good solution, but wide implementation of such policies denotes there are many challenge (Xia, 2009).

Unfamiliarity of IT System, most people are reluctant to use technology; however, the unfamiliarity of the new system can produce sharing barriers. Lack of training is one reason for not getting familiar with IT system. (Han & Anantatmula, 2007). Unrealistic Expectations, the unrealistic expectation on what technology can do, rises reluctance of using the system and thus arise knowledge sharing barriers. (Lam & Chua, 2005).

Lack of technical support among staff because there is no system, which can guarantee that it will not crash. Lack of technical support for recovery from a faulty situation or ability to anticipate future problem can hinder efficient knowledge sharing (Keyes, 2008). Social networks are the most common tools of Web 2.0 technologies that support collaboration, knowledge sharing, interaction and communication among users in different places who come together with a common interest or goal (Balubaid, 2013). Web 2.0 refers to a web application that provide for online participation, collaboration and interaction.

Shanhong (2000) explained that the application of information technologies enlarges the scope of knowledge acquisition, which is a key process in managing knowledge in

public university libraries. Social networks that support knowledge sharing in public university libraries like Facebook, video-conferencing, Twitter, telephone, portals, databases, and electronic mails.

Facebook and Twitter are some of the most recent social networks used in university libraries. Social networks commonly used in public university libraries to improve communication and knowledge sharing among users and staff because users like to use for short messages. In public university libraries, Twitter allows informal collaboration that provide relief from rising email volumes (Balubaid, 2013). KS and its potential applicability in libraries provide a variety of communication channels as strategies for KS among LS to enhance efficiency and effectiveness on knowledge sharing activities (Sarrafzadeh, Martin & Hazeri, 2010).

2.6 Proposed strategies for enhance knowledge sharing

Shepherd, (2010) argues that there is limited scientific research on knowledge sharing strategies in public university libraries, which is a clear indication that management has not realised and recognised the importance of knowledge sharing and retaining critical knowledge in the libraries for future use. The following strategies are proposed:-

2.6.1 Knowledge Repositories

Akramet et al. (2011) defines knowledge repositories as "organizational knowledge that consists of large databases, data warehouses, internet and intranet". Knowledge repositories as a strategy for knowledge sharing facilitate the documentation of appropriate operational knowledge in order to diminish attrition encounters and

assistance new staff in the learning. Integrated systems such as databases, internet and knowledge management systems facilitate the sharing and transferring of explicit knowledge to other LS, thus transferring experiences of other staff indirectly. Wamundila and Ngulube, (2011) a complete documented knowledge (explicit knowledge) can easily channel to other LS whom it's needed.

When LS are not trained in the use of knowledge management systems, it is likely that efforts to capture and share tacit knowledge will fail (Wamundila and Ngulube, 2011). LS are learning to be active in the delivery of scholarly knowledge, they need to use these systems to share operational knowledge within the library (Townley, 2001) Committing the LS to train and improve the needed knowledge sharing, using such systems.

2.6.2 Performance Evaluation and Appraisal Strategy

Performance evaluation as a strategy for knowledge sharing motivated employees to share knowledge in knowledge based institution (Cabrera & Cabrera, 2005). Rewards and performance appraisal was linked to knowledge sharing in an empirical study by Ling (2009) on knowledge sharing in an American multinational company based in Malaysia. Jain (2005), supported LS who believed that linking KS with performance appraisal increases the opportunity to share knowledge. If people know that one aspect of the performance appraisal is linked to knowledge sharing they will certainly like to ensure that they are ranked

Liu and Liu (2011) when exploring relationships between human resources practices on individual knowledge sharing in Taiwan by found that the willingness of LS to share

knowledge depended on assessments costs and benefits. This contradicts study revealing that rewarding and recognizing LS contributions sent a strong signal to the LS that the institution valued knowledge sharing.

2.6.3 Storytelling

Wijetunge, (2012) agrees that sharing stories enables LS to learn through other staffs experiences, whereby the staff who attends a training session given the opportunity to disseminate the knowledge gained to others within the library. This is an in-depth discussion of what happened during and after completion of a project or workshop to capture what lessons learnt during the entire activity (Faul & Camacho, 2004) to impart tacit knowledge from one staff to another.

A study of public university libraries storytelling tacit knowledge sharing in university libraries in Sri Lanka, found that the use of stories as a strategy for sharing tacit knowledge was absent (Wijetunge, 2012). LS did not value storytelling as a knowledge sharing strategy with the assumption that stories related to individuals are told from the individual perspective which may not be relevant to others (Wijetunge, 2012) setting a negatively image and not work-related. Khalid and Mahmood, (2008) in understanding the perception of LS on the usage of stories to share knowledge in public university libraries in institutions of higher learning in Malaysia revealed that stories were mainly used to share work-related experiences in the libraries.

Job rotation as a strategy for knowledge sharing improve the professional skills of LS (Jarvi & Uusitalo, 2004) through sharing of experiences and expertise. LS believe that job rotation gives staff an opportunity to gain a wider picture of the whole operations in

the library, which requires more energy and courage to learn new things. Earney and Martins (2009) job rotation among library assistants at Cardiff University in the United Kingdom found out that job rotation increased motivation to share knowledge on technical skills between different areas of the library services.

Adomi (2006) observes that job rotation policy in public university libraries creates opportunities for staff to share knowledge of new skills learnt, competencies and be conversant with different operational sections of the library needed for new positions. Job rotation policies in public university libraries enhances efficiency and productivity in the library during times of restructuring, however it is a challenging experience.

2.7 Knowledge Gap

Literature review reveals that there are some missing links where there is no comprehensive coverage on knowledge sharing practices among library information science professionals in improving service delivery in Public universities mainly involve knowledge transmission and absorption. Lack of understanding and unfamiliarity with the use of informal channels for knowledge sharing among staff in public university libraries has not been done. Due to various library activities, behavioral styles like, deployment, favoritism, retirement, educational level, abrupt sacking, death or sickness, it triggers staff by leaving the library without transferring tacit knowledge to upcoming staff.

The types of knowledge shared among LS in public university libraries is limited among staff working in libraries. The researcher observed that expert LS in various fields are not ready to train their colleagues on how to operate or run the machines by themselves,

instead they do it by themselves. The experts keep to themselves their tacit and embedded knowledge. The strategies available for knowledge sharing among LS in Public Universities lack capacity building and mentoring, sessions taking place affecting knowledge retention, as more experienced staff leave the service. The success of knowledge sharing relies on the availability of strategies that promote and enhance effective knowledge sharing.

The implementation of knowledge sharing strategies would motivate staff to share knowledge when they trust each other for the benefit of the library. Library structure, leadership and trust, identified as factors that influence KS among staff. The study therefore seeks to understand the knowledge sharing strategies in Public University Libraries in Kiambu County through an investigation of library staff's intentions to share knowledge. Although several studies done, there is no study that has assess the effects of knowledge sharing among LS in Public Universities exclusively focussing on Kenyan set-up and dynamics surrounding knowledge sharing. The flow of knowledge depends on knowledge sharing behaviors of the employees. Staff are afraid that they will lose knowledge power in the library if they share knowledge with others.

The challenges of knowledge sharing among LS in Public Universities majorly lie on organizational factors, individual knowledge sharing factors and technological factors. Knowledge is lost through staff are not willing to share knowledge as they viewed knowledge sharing as a way of retrenchment and job security which negative impacted on staff perceptions bearing in mind that knowledge is power. Libraries are not playing their rightful role in enhancing knowledge production within the framework of the mandate of their missions and visions. Mainly because of lack of knowledge, sharing

policies and strategies to harness staff expertise for competitive advantage and enhanced service delivery, resulting to these gaps, existing LS not utilized to enhance library service delivery.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents the methodology that was used to carry out the study. These include; research design, target population, sampling techniques, data collection instruments validity and reliability of data collection instruments, data collection procedures, data analysis and presentation and ethical consideration.

3.1 Research Design

Kothari (2019) argues that a research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. A research design is the structure within which research is conducted; it constitutes the blue print for the collection measurement and analysis of data. Descriptive survey design was adopted to determine whether using knowledge management is an effective method for service delivery through asking questions to the carefully selected sample.

Cross-sectional survey research design was used to carry out research. This design is used in an attempt to collect data from members of a population in order to investigate knowledge sharing practices among library staff in two public Universities in Kiambu County. The rationale for using the Cross-sectional survey within the case study was to collect standardised data from senior and assistant librarians, library assistants and library attendants within the two universities (Muijs, 2012). Babbie (2004) adds that Cross-sectional surveys are predominantly applied in researches that have human beings

as the units of investigation and the best technique obtainable to the social science investigator who is concerned in gathering primary data.

Cross-sectional survey is an outstanding means for assessing opinions and perceptions in a large population. The survey investigation offers a quantitative explanation of tendencies, feelings, thoughts of a populace by investigating a representative sub-set of that populace with an intention of inferring from a sample to a population (Creswell, 2014). The survey inquiry strategy is very attractive when sample generalisability is a principal inquiry purpose. Advantages of using a survey research is that it is versatile in that it enriches our appreciation of problems that influence individuals within a society since they cover a range of topics. The application of the survey design was cost effective and appropriate for collecting data for the study. The study requires collection of quantifiable information from the study sample (Saunders, Lewis, & Thornhill, 2023).

3.2 Target Population

Saunders, Lewis, and Thornhill, (2023), defines population as the entire group of individuals, events or objects having a common observable characteristic. The target population of this study was 60 library staff from JKUAT and 96 library staff from KU (156 staff) from the two public Universities in Kiambu County registered by the Commission of University Education (CUE). The main reason for selecting the population is that they are the LS's work with libraries in public Universities.

Table 3.1: Target Population of Study as per University

Designation	KU	JKUAT	No. LS.
University Librarian	1	1	2
Deputy University Librarians	1	2	3
Senior Assistant Librarian	16	7	23
Assistant Librarian	7	15	22
Senior library assistant	20	10	30
Library assistants	30	16	46
library attendants	21	9	30
Total	96	60	156

Source: Kenyatta and JKUAT university websites

3.3 Sample size and Sampling Techniques

A sample is a representative subset of a population. It is studied in order to make conclusions on the entire population through statistical inference. Sampling is the process of selecting a sample from a population. Sampling procedures are critical in social science and other experimental research (Suresh et al., 2011). The two main types of sampling techniques are probability sampling and non-probability sampling (Elfil & Negida, 2017) Sample selection depends on the population size, its homogeneity, the sample media and its cost of use as well as the degree of precision required (Salant & Dilman, 1994). A census of all the 156 library staff was sampled for this study because of the small number and hence the researcher could reach all of them to get responses.

3.4 Data Collection Instruments

Data for this study was collected using questionnaires and an interview schedule. A questionnaire is a research instrument consisting of a series of questions for purpose of gathering information from respondents. Questionnaires were thought to be a kind of written interview. They can be carried out on face to face, telephone, computer or post (Mcleod, 2018). Questionnaires provide a relatively cheap, quick and efficient way of obtaining large amounts of information from a large sample of people. Data was collected relatively quickly because the researcher would not need to be present when the questionnaires were completed. This is useful for large populations when interviews would be impractical.

Often a questionnaire uses both open and closed questions to collect data. This is beneficial as it means both quantitative and qualitative data was obtained. Using an open-ended questionnaire primary data was collected from the LS of the two public Universities in Kiambu County using questionnaires.

Interview Schedule was used to solicit needed information from University librarian and Deputy University librarians for clarity and supplement the data collected from library assistants. Orodho (2009) postulates that many people are willing to communicate orally than in writing and they would provide data more readily and fully than on a questionnaire. An investigator is able to encourage subjects and probe them deeply into a problem. In this case, structured interview questions was used. Interview as a method of research typically involves a face-to-face meeting in which a researcher (interviewer) asks an individual a series of questions.

Interviews method was picked because interviews can be very productive since the interviewer can pursue specific issues of concern, this would lead focused and constructive suggestions. Shneiderman and Plaisant (2005) observed that interview method of data collection are also have advantages in that: a) direct contact with the users often leads to specific, constructive suggestions; b) are capable of eliciting information to greater detail; c) greater detail of information can be obtained from a few respondents.

3.5 Pilot Study

A pilot study is the pre-testing of the research instruments in the field to determine the validity and reliability of the research instruments. According to Murray (2003), piloting is done in the expectation that the research instrument is improved. The purpose of pilot testing in the study was to test data collection instructions, eliminate ambiguous items and to test whether the collected data answer the research questions. The pilot test was carried out at Technical University of Kenya library staff and were excluded from the main study. Information obtained was used to revise the instruments. The pilot study was conducted to 10 library staff of Technical University of Keya. The university was preferred because it's setting are similar to those of the study site. The number of staff was enough to pilot for the validity and reliability of the study instruments. The instruments worked effectively without hitches.

3.5.1 Validity

Validity is the degree to which a test or an instrument measures the phenomenon under study (Patton, 2002). Also Saunders, Lewis, and Thornhill, (2023). define validity as the

degree of accuracy with which results obtained from analyzed data represent the reality of the phenomenon under study. This is to ensure that the validity of the findings and results of the proposed study instruments. The data points must reflect the actual measurement on the ground. To ensure this, the questionnaire was given to two senior LS from the non-sampled LS who were able to assess the validity of the statements on the questionnaire. Their views and responses pertaining the questionnaire were reviewed and used appropriately to improve the questionnaire as a data collection instrument.

3.5.2 Reliability

Reliability refers to the consistency of measuring instrument. Reliability is therefore concerned with the robustness of your questionnaire and in particular whether it will produce consistent findings at different times and in different contexts with different samples and with different research assistants (Saunders, Lewis, & Thornhill, 2023). Alternatively respondents may answer inconsistently due to instructional miscomprehension. Also reliability measures the degree to which a research instrument yields consistent results after repeated trials (Saunders, Lewis, & Thornhill, 2023). The questionnaire was formulated carefully to prevent any ambiguity and allowed the respondents to answer the questions with much ease. To ensure reliability of the questionnaire used, the respondents were sensitized on the motive, structure and the mode of answering the questionnaires. This was aimed at testing out the approach and identified any details that needed to be addressed before the main data collection went ahead.

3.6 Reliability test

The reliability of the individual items was measured by examining the internal consistency values of the items on their corresponding constructs. Cronbach's Alpha (Cronbach, 1979) measure of internal consistency was done to check the consistency of construct items. Reliability was conducted on each scale of the constructs. The Cronbach's alpha value for the second order variables ranged from 0.789 to 0.843 which was greater than the threshold 0.7. All the retained scale items for the study variables were therefore maintained for further analysis as they achieved the required thresholds for reliability. The constructs were suitable for further analysis.

3.7 Data Collection Procedures

Data collection refers to the means by which data was obtained from the subjects or elements under investigation. The researcher obtained a letter from the graduate school, Kisii University, which was used to apply for a research permit from the National Commission of Science, Technology and Innovation (NACOSTI) appendix VI. The researcher was equipped with the research permit from the National Council of Science and Technology, reported to the JKUAT and KU administrative offices (librarians) to request for permission to conduct research. The researcher was received by the deputy librarians of the two public universities libraries, who in turn introduced the researcher to the various Heads of sections, who further introduced the researcher to various staff in the respective sections. The researcher prepared a covering letter requesting the respondents' participation and attached to the questionnaires with a copy of the permit Appendix I, II, III, IV and VI. Data was collected through face to face interviews from

librarians and deputies, while the other staff filled the Questionnaires which the researcher collected after one week.

3.8 Data Analysis and Presentation

Data analysis is the mathematical treatment of quantitative or qualitative data to obtain the desired statistical measurements. Data presentation on the other hand refers to conversion of data into summarized and easily understandable graphical forms. Modes of data presentation include contingency and frequency tables and graphs. Data analysis procedures include; determination of descriptive statistics, statistical modeling and statistical inference. Collectively, these statistical procedures enabled the analyst to establish the various characteristics of data, and the relationships between variables to be able develop statistically significant relationship and forecasting models. Essentially, this culminates in drawing of valid conclusions and meaningful recommendations.

Quantitative data collected was analyzed through descriptive statistics method, where the data was coded and analyzed using the Statistical Package for Social Sciences (SPSS) tool version 22. Kaushik and Mathur, (2014) descriptive statistics deals with the presentation of numerical facts or data, in either tables or graph form, and with the methodology of analyzing the data. Qualitative data was analyzed through thematic analysis, where the data was placed into different themes derived from the responses obtained from the process of identifying patterns and themes within the data (Braun & Clarke, 2006).

3.9 Ethical Consideration

Ethics is a matter of commitment to and behaviour guided by certain values (vogt, Gardner & Haeffele, 2012). The research observed the following ethical considerations during the research. Written permission obtained from head of the respective Institution in order to conduct research. Respondents were not subjected to physical or mental injury during the study. Confidentiality of the respondents was ensured by asking them to fill questionnaire anonymously. There were no exertion of pressure during interviews and the results of the research availed to the respondents and institution by donating a copy if need be.

The researcher ensured that the information provided was purely for academic purpose leading to the attainment of the researchers' master degree and was treated with strict confident.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter focuses on data analysis, presentation, and interpretation of the findings of the study. Data was analyzed according to the study objectives from which Key thematic areas were derived. The main objective of the study was to investigate the influence of knowledge sharing practices among library staff (LS) in improving service delivery in Public University libraries in Kiambu County, Kenya.

4.2 Response Rate

The response rate was as shown in table 4.1.

Table 4.1: Individual University Representation

	Sample Size	Frequency	Response rate
KU	96	88	91.7%
JKUAT	60	58	96.71%
Total	156	146	93.6

The results in table 4.1 shows the distribution by university had a higher response whereby KU had 88(91.7%) with the respondents from JKUAT 58(96.71%). According to Cooper and Schindler (2014) states, that 50% of response rate is adequate for analysis, but when the response rate is 70% or above it is said to be excellent, as represented 93.6% response rate. From the study respondent's rate of 93.6% gave the

study a high degree of representativeness that could be relied upon to generalize the respondents' views on knowledge sharing practices among library staff on improving service delivery in public universities. From the findings this implies that almost all LS were involved in the process of collecting data.

4.3 Demographic information of the respondents

Demographic information of LS among the public Universities in Kiambu County.

4.3.1 Designation of the respondents

The study sought to find out the designation of LS among the public Universities in Kiambu County. The results were as shown in table 4.2.

Table 4.2: LS Designation or Position

Designation	Frequency	Percent
Library Assistant	43	95.6
Library Attendant	29	96.7
Senior library assistant	27	90
Assistant librarian	22	100
Senior Assistant Librarian	21	91.3
Deputy University Librarian	3	100
University Librarian	2	100
Total	146	100

Results in Table 4.2 shows the positions held by LS in both libraries implies that there was equal representation in all section of the library from all universities. The

respondents were required to indicate their job title in the library they are working for. According to the findings majority of the respondents were library assistants at 43 (95.6%), library attendants at 29(96.7%), senior library assistants had a frequency of 27(90%) Assistant librarian and senior assistant librarian were 100% and 91.3% respectively.

From the results, it clearly indicates that library assistant, library attendants and senior library assistant were the majority occupying these positions in both the libraries. This is appropriate for the study because all sections of the library are represented, library attendants, library assistant and senior library assistant are the once who are mostly closer to the users, work in information services and technical services areas and determine the effectiveness of service delivery.

4.3.2 Characteristics of Interviewees

The study sought to find out the number of LS who were interviewed and their codes.

Table 4.3: Characteristics of Interview Participants

S/No	Code	Title of Interviewee
1	UL 1	University Librarian
2	UL 2	University Librarian
3	DUL 3	Deputy University Librarian
4	DUL 4	Deputy University Librarian
5	DUL 5	Deputy University Librarian

4.3.3 Qualification of the Respondents

The study sought to find out the academic qualification of LS among the public Universities libraries in Kiambu County. The results were as shown in table 4.4.

Table 4.4: Highest academic qualification

Academic qualification		Percent
Diploma	81	55
Bachelors	45	31
Masters	16	11
PhD	4	3
Total	146	100.0
	Diploma Bachelors Masters PhD	Diploma 81 Bachelors 45 Masters 16 PhD 4

The respondents were asked to indicate their level of education, according to the findings, the proportion of respondent's education level distribution decreased with increase in education level. A majority 55%, of the respondents were diploma holders, 31% had bachelors with master and PhD holder's respondents at 11% and 3% respectively. This implies that there was a fair distribution of personnel handling knowledge within the libraries studied. The two university librarians had PhDs while the deputy university librarians had masters. The subjects had sufficient knowledge to understand the topic under the study. Following the qualifications of library staff clearly indicates that LS have rich knowledge to share across the library regardless of position, they were also in a position to fill the questionnaires indicating a significant majority

being graduates. The level of education is critical in assessing aspects of knowledge management, knowledge leakage, information sharing, and the knowledge communities.

4.3.4 Working Experience of the Respondents

The study sought to find out the working experience of LS among the public Universities in Kiambu County. In an effort to establish respondents' exposure with library operations, the respondents were asked to indicate the duration of time they worked in the library. The results were as shown in table 4.5 below.

Table 4.5: Working experience among LS in University library

Number of years worked	Frequency	Percent
Less than 5	14	9.6
6 - 10	75	51.4
11 - 15	37	25.3
Over 15	20	13.7
Total	146	100.0

The findings in table 4.5 shows that a majority 75(51.4%) had worked between 6-10 years, 37(25.3%) 11-15 years, 20(13.7%) had worked over 15 years, and 14(9.6%) had less than 5 years. This implies that the library staff who had considerable work experience and held very rich tacit knowledge acquired over time, which may benefit the future of the library services in the universities libraries through KS.

"Staff were leaving the library to look for better positions and promotion elsewhere, because they had enough working experience resulting in knowledge loss for the university library." (UL2)

Probing further the reason for staff leaving, some commented that

"Staff who complained of low salaries, delayed promotion and lack of motivation holds rich library knowledge for over six years in the current organization's" (UL 2)

LS who have trained and have long time experience resign from the library when they have not shared their rich knowledge and experience with other staff make the library services to go down.

4.4 Knowledge Sharing among Library Staff

The purpose of the study was to investigate the strategies and effects influencing knowledge sharing among (LS) Library staff in Public Universities in Kiambu County, Kenya.

Respondents were asked on a scale of 1-5 to rate statement in KS in library. The results are as shown in Table 4.6 below.

Table 4.6: Staff Understanding on the Term Knowledge Sharing

	Strongly	Disagree	Neutral	Agree	Strongly	Mean	Std.
	Disagree	n (%)	n (%)	n (%)	Agree n		Deviation
	n (%)				(%)		
KS is process of	0	3(2)	2(1)	53(36)	88(60)	4.54	.646
creating, capturing,							
storing, sharing and							
applying information							
for competitive							
advantage							
KS is regular	3(2)	10(7)	6(4)	65(45)	62(42)	4.15	.992
departmental meetings							
KS is in-house	0	13(9)	5(3)	89 (61)	39(27)	4.04	.827
databases							
KS is an extension of	4 (2.7)	47 (32)	5(3)	26(18)	64(44)	3.71	1.434
library work							
KS is ICT infrastructure	10 (7)	46(32)	9(6)	50 (34)	31(21)	3.33	1.316

Results from table 4.6 above indicates that the staff had different understanding of term knowledge sharing. Respondents with a mean of 4.54, strongly agreed that KS is a process of creating, capturing, storing, sharing and applying information for competitive advantage. Other respondents with a mean of 4.15 agreed that knowledge sharing can be achieved by regular departmental meetings. A mean of 4.04 agreed that knowledge sharing could be archived by in house databases; the databases store procedures, manuals and standards to be followed and achieved. A mean of 3.71 and 3.33 agreed that knowledge sharing can be achieved through extension of library work and knowledge sharing is ICT infrastructure.

The study implies that the LS understood KS as a process of creating, capturing, storing, sharing and applying the information for competitive advantage. This implies that knowledge sharing is a factor for enhancing the organizational goals and service delivery. From the findings Library staff understood KS as the willingness to share ideas, experiences, facts, processes and formulas with other library staff, agreeing with (Bari et al., 2020) leading to improved service delivery. The respondent UL 2 said that:-

". Knowledge sharing among staff provided an enabling climate for staff to perform their duties, such as performance evaluation systems, staff training and job rotation polices." (UL 2).

The habit of sharing knowledge in libraries makes LS to know the areas, which they can best perform and improve library services thus creating expertise in given areas. This concludes that they understood KS.

4.5 Types of Knowledge

The study was to establish the types of knowledge shared among librarians and the findings are presented in table 4.7 below.

Table 4.7: Types of knowledge sharing

Rank	Types of knowledge sharing	Frequency	Percentage (%)
1	Embedded Knowledge	130	89
2	Explicit Knowledge	102	69.9
3	Tacit Knowledge	91	62.3

From table 4.7 above the results indicates that a majority of the librarian's ranked embedded knowledge 89% (130) as the preferred types of knowledge used by LS in the work place as reflected in the sharing encounters. This implies that most LS shared embedded knowledge which is normally found in structures, routines, processes, products, and artefacts through library management initiative to formalize a certain valuable routines used in the organization using tacit and explicit knowledge agreeing with (Hlatshwayo, 2017).where knowledge from one process is incorporated into another.

Explicit knowledge was ranked second at 69.9% (102), Explicit knowledge is expressed using a system of symbols, making it to be easily communicated either in rule-based or object-based. Jackson *et al.* (2003) acknowledges that explicit knowledge management systems are quite transparent and therefore easy to replicate thus cannot be the source of sustained long-term competitive advantage. LS shows that staff majorly share routine duties unlike individual expertise in them. Tacit knowledge was ranked third at 62% (91). Tacit knowledge is unwritten and hidden knowledge, which exists in the minds of people (Maravilhas & Martins, 2019). As it is unspoken knowledge and gained through experience and involvement with other people, in comparison to explicit knowledge, it is difficult to transfer it to other persons.

4.5.1 Knowledge sharing forums

The study sort to find out in what forums are used to share knowledge by LS. The findings are presented in table 4.8 below.

Table 4.8: Knowledge sharing forums

Rank	Knowledge sharing forums	Frequency	Percentage
1	Forum (public place for meeting)	142	97
2	Workshops	113	77
3	Seminars	79	54
4	Orientation	57	39
5	Induction	33	23

From the table 4.8 above on knowledge sharing forums, forum (public place for meeting) was ranked first with 97% (142) respondents, LS share more when out of office for tea break or lunch. Knowledge shared in forums is personal, in accessible, only understood by the individual and is shared during meetings un-knowingly. Workshops were ranked second with 77% (113) respondent's, Participants in the workshop are not from one institution thus librarians (participants) express themselves fluently to attract job opportunities when they arise. The seminars with 54% (79) respondents. Orientation and induction were ranked fourth and fifth with 39% (57) and 23% (33) respondents respectively. All participants involved tend to market their institutions.

From the table 4.8 above it implies that most LS prefer to share embedded knowledge in forum (public place for meeting) this is mostly when out for tea break and workshops, because of diverse expertise for one to prove that he/she is an authority in a particular area. This creates opportunities for staff to learn from experienced staff this concurs with Kankanhalli *et al.* (2005) who posit that LS are afraid that they will lose power position

in the organization if they contribute unique knowledge to others which may make them better than the originators of knowledge.

4.6 Knowledge Sharing Methods

Respondents were asked to show how far they agreed with the knowledge sharing strategies. Results are as shown in table 4.9 below.

Table 4.9: Knowledge Sharing methods among LS in Public Universities

	Strongly	Disagree	Neutral	Agree	Strongly	Mean	Std.
	Disagree				Agree		Deviation
	n (%)						
Work groups	2(1.4)	6(4.1)	9(6.2)	26(17.8)	103(70.5)	4.69	.670
Library database	5(3.4)	9(6.2)	13(8.9)	46(31.5)	73(50.0)	4.59	.519
Project teams	5(3.4)	9(6.2)	11(7.5)	27(18.5)	94(64.4)	4.43	.873
Community of	4(2.7)	7(4.8)	18(12.3)	36(24.7)	81(55.5)	4.37	.821
Practice (CoPs)							
Learning	2(1.4)	21(14.4)	33(22.6)	47(32.2)	43(29.5)	3.69	1.082
community							
Strategic	2(1.4)	29(19.9)	35(24.0)	46(31.5)	34(23.3)	3.53	1.104
community							
Informal	7(4.8)	28(19.2)	47(32.2)	49(33.6)	15(10.3)	3.38	.940
Network							

The results in table 4.9 above indicates that the staff strongly agreed with a mean of 4.69 that knowledge can be shared through work groups mainly because within the group staff discuss an issue before implementation and with a mean of 4.59, knowledge can also be shared through library database, the databases have records of procedures,

formulas and expectations. With a mean of 4.43 respondents agreed that knowledge can be shared through project teams, project managers share their experience because of monetary value by giving half dose in order to be invited again and through communities of practice with a mean of 4.37 some staff post unprofessional and inappropriate information to be shared. A mean of 3.69 and 3.53 respondents agreed on KS can be shared though learning community and Strategic community respectively. Respondents were neutral on informal network with a mean of 3.38.

This implies that respondent agreed that some of the methods such as work group, project teams and communities of practice were available but were neutral on informal networks may be because of lack of knowledge. The results confirm Fong (2003) observation that knowledge sharing is working with other knowledge processes, for the success of the organizational objectives. The DUL 4 and DUL 5 from both universities agreed that: -

"Knowledge sharing methods were available in the library, in that staff were organized in sections and each section performs its rightful duties. For example, circulation staff share all activities in the section and when handing over to shift workers. There is one senior staff in charge, (empties) who oversees coordination of services at circulation, matched with staff with similar interests." (DUL 4)

"Confirmed that staff were scheduled individually on how they will be attending training to enhance their knowledge. Each section has a list of activities and procedure of doing work, which is shared in case of transfer or resignation. Exit minutes are also filled in the librarian's office and the soft copy of procedures are kept in the library database." (DUL 5).

This confirms that there is knowledge sharing among library staff to some extent depending on the section of library that you are working, however other sections like IT, reference and processing staff are not ready to share their expertise in order to remain an touched when reshuffle is being done.

4.6.1 Data Capturing methods

The study sought to find out how the library ensured that it retained and shared knowledge of staff leaving the library for new employment or retirement. The results are as shown in table 4.10.

Table 4.10: Data Capturing methods

	Frequency	Percent							
Creating a library staff database where staff share	12	8%							
information									
Exit plans to ensure knowledge is captured and orientation of	126	89%							
new users and induction of new staff									
Inform library clients on everyday activities	4	3%							
Total	142	100							

The results in table 4.10 indicates the different ways libraries used to retained and shared knowledge retention with 126 (89%) who were the majority indicated that there was exit plans to ensure knowledge is captured and orientation of new users and induction of new staff. LS who are exiting were asked to write a report of events in the section and mold LS whom they are working with earlier enough before exit time. 12 (8%) indicated said creating a library staff database where staff share information, the library database store both video and procedures captured during meeting or workshops which are later viewed or read by other staff when stack during working. At least 4 (3%) indicating the need to inform library clients on everyday activities, this helps the new staff to capture events as they happen. From the results it implies that majority of the staff were aware of the methods used in capturing of knowledge of staff leaving the library for new employment or retirement.

4.6.2 Methods of acquiring knowledge

Respondents were asked to indicate how they captured knowledge was acquired from external and internal clients. Results are as shown in table 4.11 below.

Table 4.11: Methods of acquiring knowledge

Capturing/ Acquiring	Strongly	Disagree	Neutral	Agree	Strongly	Mean	Std.
	Disagree				Agree		Deviation
Networking with other			3(2.1)	34(23.3)	109(74.7)	4.73	.492
libraries and with institutions							
of all kind							
Attending conferences,			5(3.4)	48(32.9)	93(63.7)	4.60	.557
seminars, and workshops							
Online databases Searching			6(4.1)	53(36.3)	87(59.6)	4.55	.576
Standardized routine	0	2(1.4)	14(9.7)	78(54.2)	50(34.7)	4.22	.674
information-update reports							
Discussion forums		4(2.7)	18(12.5)	77(53.5)	45(31.3)	4.13	.731
Collating internal profiles of	4(2.7)	27(18.5)	24(16.4)	47(32.2)	44(30.4)	3.68	1.167
academic librarians							
Buying knowledge products or	8(5.5)	44(30.1)	16(11.0)	37(25.3)	41(28.1)	3.40	1.321
resources in the form of							
manuals, blueprints, research							
reports and other reports							
Customer based client system	20(13.7)	26(17.8)	19(13.0)	46(31.5)	35(24.0)	3.34	1.377
that capture reference and							
responses							
Subscribing to listservs and	4(2.7)	54(37.0)	19(13.0)	33(22.6)	36(24.7)	3.29	1.271
online or virtual Communities							
of Practice							
Existence of a folder of FAQs	20(13.7)	28(19.4)	30(20.8)	24(16.8)	42(29.3)	3.28	1.421

The results in table 4.11 show respondents strongly agreed that they networked with other libraries and with institutions of all kind with a mean of 4.73. This is the act of benching marking with other libraries of same making. Respondents also strongly agreed that they attended conferences, seminars, and workshops, hand acquired knowledge through searching online databases with a mean of 4.60 and 4.55 respectively. Some LS when given opportunities during seminars, conferences and

workshops they tend to shine to others forgetting that they are acquiring new knowledge. A mean of 4.22 preferred standardized routine information update because this are agreed procedures of doing work. A mean of 4.13 preferred discussion forums as a method of acquiring knowledge, A mean of 3.68 Collating internal profiles of academic librarians, and a mean of 3.34 agreed that customer based client system that capture reference and responses. Buying knowledge products or resources in the form of manuals, blueprints, research reports and other reports a mean of 3.40, Customer based client system that capture reference and responses a mean of 3.34, Subscribing to listservs and online or virtual Communities of Practice with a mean of 3.29 and Existence of a folder of FAQs with a mean of 3.28.

From the results it implies that majority of the staff were aware of the methods used in acquiring of knowledge from their internal and external clients. Respondents said that

"the attitude of library staff towards acquiring and capturing knowledge is positive however some are not ready to share their knowledge mainly for pride of the position held by them" (UL 2).

4.6.3 Knowledge Retention methods

The study sought to find out how the library ensured that they retained and shared knowledge of staff leaving the library for green pasture or retirement. The results are as shown in table 4.12.

Table 4.12: How Library retains and shares knowledge from staff

Knowledge Retention methods	Frequency	Percent
Achieving working procedures and staff induction	70	80
No formal process	10	11
Through all campus's librarian meetings done every year where	2	2
experiences and reports are shared and quarterly reports		
Recruiting some staff to replace the departing ones	3	3
capturing information and disseminate them to the user, online	2	2
database		
Total	87	100

Results in table 4.12 revealed that libraries used different ways to ensure retention and knowledge sharing among staff due to attrition by staff leaving the library for greener pastures or through retirement/death. The majority of the staff at 70 (80%) felt that achieving working procedures and staff induction formed a strategy for retention and sharing of knowledge by LSs. This implies that LSs were aware of the need for retaining and sharing knowledge. The study therefore contradicts Kankanhalli *et al.* (2005) who posited that LS were afraid to share knowledge for fear of losing power position in the organization if they contribute unique knowledge. The study concludes that majority of LS supported knowledge retention and sharing, by preparing work procedures, induction, regular meetings, exit minutes and databases for work procedures. The respondents DUL 3 said that:-

"They organized for an exit plan to ensure knowledge is captured and created a library staff database where staff share information." (DUL 3).

"In some sections where mature staff who are about to retire a junior LS is deployed work and learn from exiting staff" (DUL 3).

This helps to build continued retain and share knowledge of exiting staff.

4.6.4 Knowledge Skills and Expertise

The study sought to find out the skilled and expertise shared among LS. The results are as tabulated in table 4.13.

Table 4.13: Knowledge skills and expertise shared by Library Information science professionals.

	Strongly	Disagree	Neutral	Agree	Strongly	Mean	Std.
	disagree				Agree		Deviation
Orientation skills	0	0	2(1)	37(25)	107(73)	4.78	.415
Marketing skills	0	27(18)	39(27)	31(21)	49(34)	4.71	.487
Acquisitions of new materials skills	0	7(5)	5(3)	58(40)	76(52)	4.69	.545
Online databases search skills	0	1(1)	4(3)	49(34)	92(63)	4.63	.563
Management skills	0	26(18)	45(31)	32(22)	43(29)	4.60	.492
Classification and cataloguing skills	0	1(1)	5(3)	57(39)	83(57)	4.58	.573
Data entry skills	0	1(1)	3(2)	29(20)	113(77)	4.48	.528
Information literacy skills	2(1)	45(31)	16(11)	27(18)	56(38)	3.66	1.097

The results in table 4.13 shows the staff knowledge skills and expertise shared among LS. The results indicated that staff strongly agreed that orientation skills with a mean of

4.78, marketing skills with a mean of 4.71, and acquisitions of new materials skills with mean of 4.69 was shared among LS. Respondents also strongly agreed that they shared online databases search skills with a mean of 4.63, management skills with a mean of 4.60, classification and cataloguing skills of library materials with a mean of 4.58, and Data entry skills with a mean of 4.48. Respondents agreed that Information literacy skills with a mean of 3.66. Implications of the study is that LSs share a variety of skill and expertise in handling knowledge. The study concludes therefore that there exists professionalism in Library work.

4.6.5 Knowledge sharing Channels

Respondents were asked to indicate what knowledge sharing channels used in their library. The results are as shown in table 4.15 below.

Table 4.14: Knowledge Sharing channels used in the library

	Strongly	Disagree	Neutral	Agree	Strongly	Mean	Std.
	Disagree				Agree		Deviation
E-mail	0	2(1)	3(2)	34(23)	107(73)	4.72	.508
Face to face	0	0	6(4)	59(40.4)	81(55.5)	4.54	.589
meetings							
Libraries web page	2(1)	1(1)	9(6)	49(34)	85(58)	4.47	.754
Seminars	2(1)	5(3)	11(8)	55(38)	73(50)	4.22	.921
Intranet	2(1)	3(2)	37(25)	53(36)	51(35)	4.05	.916
Telecommunication	5(3)	59(40)	24(16)	27(18)	31(21)	3.14	1.274
Blogs	8(5)	54(37)	53(36)	12(8)	19(13)	2.92	1.108
Forum	33(23)	39(27)	28(19)	16(11)	30(21)	2.88	1.423
Wikis	37(25)	41 (28)	28(19)	13(9)	27(18)	2.75	1.423
Skype	13(9)	76(52)	22(15)	14(10)	21(14)	2.69	1.229

The results in 4.14 shows that staff strongly agreed that knowledge was shared among librarians using email with a mean of 4.72 and face-to-face meetings with a mean of 4.54. Respondents agreed that they used of libraries web page with a mean of 4.47, seminars with a mean of 4.22 and intranet with a mean of 4.05. Some respondent were neutral on the use of telecommunication with a mean of 3.14, blogs with a mean of 2.92; forum with a mean of 2.88; wikis with a mean of 2.75 and Skype with a mean of 2.69. These patterns may be due to lack of the equipment and knowledge to interact with various modern communication platforms.

This implies that LS had slow adoption of new technologies as information delivery tools. The results reveal a point of departure in technology adoption in knowledge sharing. With the use of email and web pages taking prominence, however face-to-face meetings still hold importance in traditional knowledge sharing practices the respondents DUL 5 and UL 2 from two public universities affirmed that

"There is full time Internet for all its electronic transactions like emails, intranet, blogs wikis, skype and telecommunication. Above all because of location and accessibility WhatsApp has taken root in terms of Knowledge sharing." (DUL 5).

"Internet is mandatory currently in any public university because most information materials which are not printed can be accessed online and almost all communications are done online". (UL 2).

This has improved service delivery in public university libraries, thus encouraging KS among library staff.

4.6.6 Knowledge Sharing improve/Promote service delivery

Further, respondents were asked to show how the KS techniques supported service delivery. The results are as computed in table 4.15 below.

Table 4.15: Knowledge Sharing Support on service delivery

-	Frequency	Percent
Build capacity across different carders	44	35.2
Formulation of work procedures and staff orientation	23	18.4
Marketing library products and services	15	12.0
Transfer of knowledge and experience to upcoming	10	8.0
librarians		
Create uniformity in working relations	10	8.0
Easy information access	10	8.0
Consistency in service delivery	6	4.8
promoting professionalism and reaches many people in	3	2.4
less time		
Bringing information closer to the user, easy access to	2	1.6
information and retrieval		
Contribute to database collection	2	1.6
	125	100

The results in table 4.15 shows that 125 responded to the question with 21 respondents declining. The results indicated that knowledge sharing can improve and promote service delivery by building capacity across different carders with a mean of out of which 44(35.2%). formulation of work procedures and staff with a mean 23(18.4%) and orientation with a mean 15(12%) with 10(8%) marketing library products and services.

Respondents also disagreed that transfer of knowledge and experience to upcoming librarians, creates uniformity in working relations and easy information access respectively in equal proportion. With a mean of 10(8%). This study confirms that KS has a positive impact on service delivery. It confirms the contribution of Alavi and Leidner (2001) that knowledge sharing systems encompass technological initiatives useful in the creation of databases of experts, the development of decision aids and expert system.

4.7 Effects of knowledge sharing on library staff on improve service delivery

The second objectives were to assess the effect of knowledge sharing among LS on improve service delivery. Respondents were asked to indicate what they thought were the effects of KS in the library. The results are as shown in table 4.16.

Table 4.16: Effects of Knowledge Sharing among LS on improve service delivery

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree n	Mean	Std. Deviation
	n (%)	n (%)	n (%)	n (%)	(%)		Deviation
Technological growth	4 (2.7)	3 (2.1)	11 (7.5)	53 (36.3)	75 (51.4)	4.36	.894
Trust	5(3)	7(5)	9(6)	54(37)	71(49)	4.33	.946
Attitude; lack of	6(4)	8(5)	11(8)	49(34)	72(49)	4.22	1.059
interaction between							
those who need							
knowledge and those							
who can provide							
knowledge							
Commitment	5(3)	11(8)	7(5)	59(40)	74(51)	4.19	1.029
Image; opinion or Lack	12 (8.2)	10 (6.8)	9 (6.2)	38 (26.0)	77 (52.7)	4.14	1.247
of resources							
Behavioral Control	2(1)	8(5)	20(14)	66(47)	48(33)	4.04	.872
Loss of power; Fear	16 (11)	15 (10.3)	19 (13.0)	35 (24.0)	61 (41.8)	4.01	1.236
Knowledge being							
misused by taking unjust credit for it							
Knowledge	4 (3)	17 (11.6)	11 (7.5)	85 (58.2)	29 (19.9)	3.82	.947
capturing/codification;	4 (3)	17 (11.0)	11 (7.5)	03 (30.2)	2) (1).))	3.62	.)47
Give information about							
it.							
Lack of participation	16 (11.0)	15 (10.3)	15 (10.3)	45 (30.8)	55 (37.7)	3.79	1.325
Lack of opportunity for	12 (8.2)	14 (9.6)	12 (8.2)	75 (51.4)	33 (22.6)	3.72	1.135
education and training							
Retention of highly	8 (5.5)	35 (24.0)	30 (20.5)	41 (28.1)	32 (21.9)	3.63	1.340
skilled and experienced							
staff is not a high							
priority in the library							
Lack of rewards and	6 (4.1)	49 (33.6)	11 (7.5)	41 (28.1)	39 (26.7)	3.31	1.308
recognition systems that							
would motivate staff to							
share knowledge	10 (7)	22 (22)	25 (25)	44 (20)	25 (15)	2.22	1 150
Efficiency; Ability to	10 (7)	33 (23)	37 (25)	41 (28)	25 (17)	3.22	1.178
work well to improve							
service delivery	10 (6.9)	51 (34.9)	16 (11 0)	27 (19 5)	12 (29 9)	2 10	1 269
Lack of formal and informal activities to	10 (6.8)	31 (34.9)	16 (11.0)	27 (18.5)	42 (28.8)	3.19	1.368
cultivate culture of							
knowledge sharing							
Subjective Norms;	12 (8)	54 (37)	11 (8)	52 (36)	17 (12)	3.04	1.225
Physical working	12 (0)	31(31)	11 (0)	52 (50)	17 (12)	5.07	1.223
environment and layout							
of work areas restrict							
effective service delivery							

The results in table 4.16 showed that of the respondents agreed to technological growth and Trust, with a mean of 4.36 and 4.33 respectively. Even though technological improves knowledge sharing trust affect service delivery because you cannot share information with one does not trust. The respondents agreed to attitude, lack of interaction between those who need knowledge and those who can provide knowledge with a mean of 4.22 and affirmed to commitment with a mean 4.19, this implies that if you attitude with fellow LS is not good there is no KS. The respondents agreed to image; opinion or lack of resources with a mean of 4.14 and behavioral control with a mean of 4.04, some LS they like to seen as the only figureheads in certain areas. The respondents agreed to loss of power; Fear Knowledge being misused by taking unjust credit for it with a mean of 4.01 and knowledge capturing/codification; give information about it with a mean of 3.82. LS fail to share in order to remain functional and relevant in an area of specialty or expert. The respondents agreed to lack of participation with a mean of 3.79, lack of opportunity for education and training with a mean of 3.72 and retention of highly skilled and experienced staff is not a high priority in the library with a mean of 3.63. The respondents were neutral to lack of rewards and recognition systems that would motivate staff to share knowledge with a mean of 3.31. The respondents were neutral to efficiency; ability to work well to improve service delivery with a mean of 3.22 and lack of formal and informal activities to cultivate culture of knowledge sharing with a mean of 3.19. The respondents were neutral to subjective norms; physical working environment and layout of work areas restrict effective knowledge sharing in my workplace to improve service delivery with a mean of 3.04. When working environment is not conducive, LS fail to share knowledge lowering service delivery

The implications of the study on the effects of KS in libraries is that majority agreed that the constructs of KS had a positive effect of library service delivery. The study therefore confirms that KS has an influence on planning, management and execution of library services. The respondents DUL 1 agreed that:-

"Due to technological growth, trust, image, loos of power and Knowledge capturing/codification staff were not ready to share their indepth knowledge for fear of being outshined." (DUL 1).

Some LS had very rich knowledge which if shared will improve service delivery only if there are rewards when shared with other staff in order to get more in-depth from this staff.

Further, respondents were asked to show how the library dealt with the effects of service delivery. This was a qualitative question and the following themes emerged as shown in table 4.17 below.

Table 4.17: How Library deals with the effects of knowledge Sharing to improve service delivery

	Frequency	Percent
Job training, seminars and workshop	62	44.9
Recruitment of skilled work force and training of staff	17	12.3
regularly		
Constant meeting and circulars to ensure that all staff	10	7.2
are informed of the direction the library is moving to		
improve service delivery		
Encourage staff to update their skills and organization	10	7.2
of training seminars for users		
Organizes information and literary sessions and	10	7.2
working teams by management		
Section rotation of duties	7	5.1
Equipment staff with enough working tools	6	4.3
Staff promotion and refresher courses, reward best	6	4.3
performance, working tools to staff and use of new		
technology		
Acquiring and disseminating information at the right	4	2.9
time to the user		
Laying down guidelines and policies to be followed by	4	2.9
users		
Bench marking, promotion of staff and hiring of new	2	1.4
staff and adapt to current trends		
Total	138	100

In table 4.17, responses on the effects of knowledge sharing in improving service delivery 62 (44.9%) of the respondents indicated that job training. Seminars and workshop followed by 17(12.3%), recruitment of skilled work force and training of staff regularly, while constant meeting and circulars to ensure that all staff are informed of the direction the library is moving to improve service delivery. Encourage staff to update their skills and organization of training seminars for users and organizes information and literary sessions and working teams by management 10 (7.2%) in equal proportions. Minority indicated that bench-marking, promotion of staff and hiring of new staff and adapt to current trends were considered ways of dealing with the effects of Ks in Libraries. Implications of the study is the respondents did not consider comparing with other institutions was a positive way of dealing with the effects. The study concludes that key components of KS were not employed in overcoming challenges. Benchmarking is one of the key KS structure and may be ignored in library service and the current study is suggesting this to be built in the KS strategies by LS in service delivery.

The study sought information on the LS understanding of KS. The results are as shown in table 4.18 below.

Table 4.18: LS under standing of Knowledge Sharing

	Strongly	Disagree	Neutral	Agree	Strongly	Mean	Std.
	Disagree				Agree		Deviation
Knowledge sharing	4(3)	9(6)	8(5)	42(29)	83(57)	4.39	.849
is a teamwork and							
all must contribute							
The basic values	2(1)	4(3)	8(5)	79(54)	55(38)	4.27	.764
and principles							
support knowledge							
sharing							
It is an open,	2(1)	4(3)	16(11)	86(59)	38(26)	4.08	.734
encouraging and							
supportive culture							
The staff believe	12(8)	32(22)	40(27)	36(25)	26(18)	2.95	1.487
that knowledge							
sharing is good for							
newcomers only							

The results in table 4.18 show that librarians agreed that knowledge sharing is a teamwork and all must contribute with a mean of 4.39, when all contribute to one goal improve service delivery. The basic values and principles support knowledge sharing with a mean of 4.27, and it is an open, encouraging and supportive culture with a mean of 4.08. When all LS accept that KS is part and parcel of their duty trust will not be a problem. Staff were neutral that knowledge sharing is good for newcomers with a mean of 2.95. Not only newcomers can share knowledge but all staff are eligible regardless of years of experience. The findings imply that LS agreed and embraced the culture of KS as a practice.

4.8 Challenges of knowledge sharing practices

The fourth objectives were to assess the Challenges of knowledge sharing among LS. Respondents were asked to indicate what they thought were the Challenges of KS in the library. The results are as shown in table 4.19 below.

Table 4.19: Challenges of knowledge sharing practices

	Strongly	Disagree	Neutral	Agree n	Strongly	Mean	Std.
	Disagree	n (%)	n (%)	(%)	Agree n		Deviation
	n (%)				(%)		
Trust	2 (1.4)	16 (11.0)	2 (1.4)	46 (31.5)	80 (54.8)	4.321	1.01
Social interaction	2 (1.4)	7 (4.8)	12(8.2)	54 (37.0)	71 (48.6)	4.314	0.89
ties							
Leadership	6 (4.1)	12 (8.2)	2 (1.4)	51 (34.9)	75 (51.4)	4.263	1.07
Identification	14 (9.6)	1 (0.7)	14(9.6%)	47 (32.2)	70 (47.9)	4.141	1.19
Facilitation	10 (6.8)	5 (3.4)	12(8.2)	68 (46.6)	51 (34.9)	3.994	1.06
Communication	4(2.7)	14 (9.6)	13 (8.9)	71 (48.6)	44 (30.1)	3.877	0.95
Co-ordination	4(2.7)	16 (11.0)	12(8.2)	85 (58.2)	29 (19.9)	3.827	0.94
Organization	0	58 (39.7)	24 (16.4)	35 (24.0)	29 (19.9)	3.353	1.22
Culture							
Organization	2 (1.4)	58 (39.7)	14 (9.6)	53 (36.3)	19 (13.0)	3.314	1.19
Structure							

The study results from table 4.19 reveal that a mean of 4.321 the respondents agreed that trust, LS fear to share knowledge because it can be used as a weapon against them. A mean of 4.263 agreed of leadership, senior library staff fear being outshined by their juniors thus keeping knowledge for themselves. A mean of 4.314 of respondents agreed of social interaction ties, experienced (expert) LS choose who to associate with depending on level of education. A mean of 4.141 respondents agreed on identification,

expert LS take advantage of being an-authority in a particular area, a mean of 3.994 respondents agreed on facilitation, LS take advantage of rewards before sharing their experience with other staff. A mean of 3.877 of the respondents agreed of communications as a factor hindering knowledge sharing and with a mean of 3.827 agreed of co-ordination as challenge of knowledge sharing distribution. A mean of 3.353 respondents were neutral on organization culture, and with a mean of 3.314 respondents on organization structure respectfully, senior staff take pride of office and position in organization structure to scare away those in junior position whom they can share knowledge. The pattern of the findings implies that trust, leadership, Social interaction ties, Identification and facilitation factors majorly hinder knowledge sharing among LS in Public universities, however Organization Culture issues don't affect the success of knowledge sharing among LS.

Another challenge is LS unwillingness to change and trust fellow colleagues because of fear to be outshined by others Munyai (2011) stresses the importance of knowledge sharing policies to facilitate the collection, development and dissemination of knowledge within the University libraries which is not considered because of fear of job loose.

4.9 Proposed strategies for enhancing knowledge sharing

The respondents were asked to propose some strategies that were to be implemented to motivate LS Share knowledge in the library. The results are as shown in table 4.20 below.

Table 4.20: Proposed strategies for enhancing knowledge sharing

S/No.	Strategy	Frequency	Percentage
1	Story telling	142	97
2	Knowledge repositories	138	95
3	Performance Evaluation and	97	66
	Appraisal Strategy		
4	Job rotation	134	92
5	Staff training	140	96

From table 4.20 above the results indicates that a majority of the librarian's ranked story-telling at 97% (142) as the most preferred proposed strategy for knowledge sharing among LS. Staff training was ranked second at 96% (140) respondents, knowledge repositories third with 95% (138) respondents and Job rotation at 92% (134) respondents. Performance evaluation and appraisal Strategy was ranked at 66% (97) respondents below others. This implies that most LS did not understand that performance evaluation and appraisal strategy can be used to share knowledge agreeing with Liu and Liu (2011) who explored the relationships between human resources practices on individual knowledge sharing. They found out that staff willingness to share knowledge depended on assessments costs and benefits. This contradicts study revealing that rewarding and recognizing LS contributions sent a strong signal to the LS that the institution valued knowledge sharing.

Strategies available for knowledge sharing among LS

4.10 Regression

Table 4.21: Knowledge Sharing Strategies Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.938 ^a	.880	.873	.260

a. Predictors: (Constant), Library database, Informal Network, Work groups,
 Community of Practice (CoPs), Strategic community, Learning Community,
 Project teams, Learning community

The knowledge sharing strategies explain a significant proportion of variance on influencing knowledge sharing, R^2 = 0.880. This implies that 88% of the proportion in knowledge sharing model can be explained by knowledge sharing strategies. Other strategies not covered by this study contribute to 12%. This implies that the model has a good fit between the strategies available and knowledge sharing among LS for further analysis to be conducted on the strategies to determine their influence on knowledge sharing. This means that the variables had a positive effect in the dependent variable and therefore cannot be ignored as a contribution to the study.

Table 4.22: Knowledge Sharing Strategies ANOVA

Model		Sum of Squares	df	Mean	F	Sig.
				Square		
1	Regression	67.588	8	8.449	125.257	.0001 ^b
	Residual	9.241	137	.067		
	Total	76.829	145			

a. Dependent Variable: Knowledge sharing

b. Predictors: (Constant), Library database, Informal Network, Work groups, Community of Practice (CoPs), Strategic community, Learning Community, Project teams, Learning community.

The F-ratio in the ANOVA tests whether the overall regression on knowledge sharing model is a good fit for the data. The ANOVA table shows that the independent variables significantly predict the dependent variable, F(8,137) = 15.907, P-value<0.0001) which is less than 0.05 level of significance.

Table 4.23: Knowledge Sharing Strategies Factors Coefficients

Model	Unstand	ardized	Standardized	t	Sig.
	Coefficie	ents	Coefficients		
	В	Std.	Beta	-	
		Error			
1 (Constant)	.039	.235		.166	.868
Work groups	.188	.045	.178	4.223	.0001
Project teams	.079	.040	.097	1.997	.048
Learning community	.254	.047	.377	5.380	.0001
Strategic community	.035	.044	.053	.799	.426
Informal Network	.227	.035	.296	6.527	.0001
Community of Practice	.147	.040	.169	3.676	.0001
(CoPs)					
Library database	045	.059	032	760	.448
a. Dependent Variable: Knowledg	ge sharing				

The knowledge sharing strategies factors that had a statistically significant influence on library knowledge sharing at 95% confidence interval were; library knowledge sharing working groups, library knowledge sharing project teams, library knowledge sharing learning community, library knowledge sharing informal network and library knowledge sharing community that have P-value less 0.05. Work groups, project teams, learning community, informal network and community of practice (CoPs) were strategies available influencing the knowledge sharing model.

Effects of knowledge sharing among LS in Public Universities in Kiambu County, Kenya.

4.11 Regression of the effect's of knowledge sharing model

Table 4.24: Effects of Knowledge Sharing Model Summary'

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.905ª	.819	.795		.252

a. Predictors: (Constant), Retention of highly skilled and experienced staff is not a high priority in the library, Knowledge capturing/codification; Give information about it., Image; opinion or Lack of resources, Behavioral Control, Technological growth, Lack of formal and informal activities to cultivate culture of knowledge sharing. Commitment, Attitude; lack of interaction between those who need knowledge and those who can provide knowledge, Efficiency; Ability to work well, lack of opportunity for education and training Trust. Loss of power; Fear for knowledge being misused by taking unjust credit for it, Subjective Norms; Physical working environment and layout of work areas restrict effective knowledge sharing in my workplace, Lack of rewards and recognition systems that would motivate staff to share knowledge.

The study also found that the effects of knowledge sharing influencing knowledge sharing explained a significant proportion of variance in knowledge sharing model, R²= 0.819. This implies that 81.9% of the proportion in knowledge sharing model can be explained by effects of knowledge sharing in public university library. Other effects not covered by this study therefore contribute to 18.1%. This implies that the model has a good fit between the assess and knowledge sharing available and knowledge sharing among LS for further analysis to be conducted on the strategies to determine their

influence on knowledge sharing. This means that the variables ha a positive effect in the dependent variable and therefore cannot be ignored as a contribution to the study.

Table 4.25: Effects of Knowledge Sharing ANOVA

Model		Sum	of	df	Mean	F	Sig.
		Squares			Square		
1	Regression	32.116		15	2.141	33.764	.0001 ^b
	Residual	7.102		112	.063		
	Total	39.219		127			

a. Dependent Variable: knowledge sharing

b. Predictors: (Constant), Retention of highly skilled and experienced staff is not a high priority in the library, Knowledge capturing/codification; Give information about it. Image; opinion or Lack of resources, Behavioral Control, Technological growth, Lack of formal and informal activities to cultivate culture of knowledge sharing, Commitment, Attitude; lack of interaction between those who need knowledge and those who can provide knowledge. Efficiency; Ability to work well, lack of opportunity for education and training, Trust, Loss of power; Fear Knowledge being misused by taking unjust credit for it. Subjective Norms; Physical working environment and layout of work areas restrict effective knowledge sharing in my workplace. Lack of rewards and recognition systems that would motivate staff to share knowledge.

The F-ratio in the ANOVA tests whether the overall regression model is a good fit for the data. The table shows that the effects of knowledge sharing significantly predict the knowledge sharing, F (15, 112) = 33.764, P-value<0.0001 since its less than 0.05 level of significance.

Table 4.26: Effects of Knowledge Sharing Coefficients

Model		dardized cients	Standardized Coefficients	t	Sig.
	В	Std.	Beta		
		Error			
1 (Constant)	088	.230		383	.702
Attitude; lack of interaction between	.097	.031	.186	3.131	.002
those who need knowledge and those					
who can provide knowledge					
Commitment	.009	.031	.017	.298	.766
Trust	.099	.039	.163	2.514	.013
Behavioral Control	.057	.036	.086	1.603	.112
Subjective Norms; Physical working	.070	.035	.144	1.994	.049
environment and layout of work areas					
restrict effective knowledge sharing in					
my workplace					
Efficiency; Ability to work well	.083	.031	.163	2.664	.009
Knowledge capturing/codification;	.049	.029	.089	1.678	.096
Give information about it.					
Image; opinion or Lack of resources	.010	.038	.023	.258	.797
Loss of power; Fear Knowledge being	.033	.028	.076	1.160	.249
misused by taking unjust credit for it					
Technological growth	.114	.030	.196	3.752	.0001
Lack of participation	.161	.033	.390	4.951	.0001
lack of opportunity for education and	.070	.035	.140	1.976	.051
training					
Lack of formal and informal activities	.086	.035	.216	2.441	.016
to cultivate culture of knowledge					
sharing					
Lack of rewards and recognition	.016	.031	.037	.496	.621
systems that would motivate staff to					
share knowledge					
Retention of highly skilled and	.101	.024	.256	4.167	.0001
experienced staff is not a high priority					
in the library					
a. Dependent Variable: Knowledge sharing					

The effects of knowledge sharing had a statistically significant influence on Knowledge sharing at 95% confidence interval were; library attitude; lack of interaction between those who need knowledge and those who can provide knowledge. Library trust, library Subjective Norms; Physical working environment and layout of work areas restrict effective knowledge sharing at workplace. Efficiency; Ability to work well, library technological, lack of participation, lack of formal and informal activities to cultivate culture of knowledge sharing and retention of highly skilled and experienced staff is not a high priority in the library knowledge sharing community that have P-value less 0.05.

Attitude; lack of interaction between those who need knowledge and those who can provide knowledge, trust, Subjective Norms; Physical working environment and layout of work areas restrict effective knowledge sharing in my workplace. Efficiency, ability to work well, technological growth, Lack of participation, lack of formal and informal activities to cultivate culture of knowledge sharing and retention of highly skilled and experienced staff is not a high priority in the library factors found to have significant influence on knowledge sharing model.

Challenges of knowledge sharing by LS in Public Universities in Kiambu County, Kenya

Table 4.27: Challenges of Knowledge Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.957ª	.915	.910	.224

a. Predictors: (Constant), Identification, Organization Structure, Facilitation, Coordination, Social interaction ties, Communication, Leadership, Organization Culture, Trust

The study also found that Challenges of knowledge sharing explained a significant proportion of variance in knowledge sharing model in service delivery, R^2 = 0. 915. This implies that 91.5% of the proportion in knowledge sharing model can be explained by Challenges of knowledge sharing in public university library. Other factors not covered by this study therefore contribute only 8.5%. This implies that the model has a good fit between the hindering factors and knowledge sharing among LS for further analysis to be conducted on the strategies to determine their influence on knowledge sharing. This means that the variables had a positive effect in the dependent variable and therefore cannot be ignored as a contribution to the study.

Table 4.28: Challenges of Knowledge ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.025	9	8.336	165.582	.0001 ^b
	Residual	6.948	138	.050		
	Total	81.973	147			

a. Dependent Variable: Knowledge sharing

b. Predictors: (Constant), Identification, Organization Structure, Facilitation, Coordination, Social interaction ties, Communication, Leadership, Organization Culture, Trust. The F-ratio in the ANOVA tests whether the overall regression model is a good fit for the data. The table shows that the independent variables statistically predict the dependent variable, F(9, 138) = 165.582, P-value<0.0001 since its P-value less than 0.05 level of significance.

Table 4.29: Challenges of Knowledge Coefficients

Model	Unstand	ardized	Standardized	t	Sig.	
	Coefficie	ents	Coefficients			
	В	Std.	Beta	.		
		Error				
1 (Constant)	211	.120		-1.756	.081	
Leadership	.062	.052	.091	1.201	.232	
Trust	.132	.057	.182	2.312	.022	
Organization Culture	.227	.037	.362	6.098	.0001	
Organization	.045	.035	.072	1.299	.196	
Structure						
Communication	.138	.029	.179	4.758	.0001	
Co-ordination	.087	.029	.111	3.021	.003	
Facilitation	.138	.026	.196	5.353	.0001	
Social interaction ties	.097	.032	.118	3.050	.003	
Identification	.162	.027	.263	6.037	.0001	

a. Dependent Variable: Knowledge sharing

The Challenges of knowledge sharing that had a statistically significant influence on Knowledge sharing at 95% confidence interval were; trust, Organization Structure, Communication, Co-ordination, facilitation, Social interaction ties and identification in hindering knowledge sharing at P-value <0.05 level of significance. Trust, Organization

Culture, Communication, Co-ordination, Facilitation, Social interaction ties and Identification as hindering factors were found to have significant influence on knowledge sharing model.

4.12 Overall regression summary model

Table 4.30: Overall Regression Summary Model

Regression

]	Model Summar	y	
Model	R	R Square	Adjusted	R	Std. Error of the Estimate
			Square		
1	.798 ^a	.759	.735		.424

a. Predictors: (Constant), Challenges of knowledge sharing practices in the library, Library knowledge sharing strategies service delivery to client's satisfaction, Effect of knowledge sharing.

The regression summary model on library management support, library knowledge sharing strategies service delivery to clients' satisfaction and Challenges of knowledge sharing practices in the library explained a significant proportion of variance in the knowledge sharing overall model in service delivery, Adjusted R²=0.735. This implies that 73.5% of the proportion in knowledge sharing model can be explained by the overall summary factors in public university library. Other factors not covered by this study therefore contribute only 26.5%. This implies that the overall model has a good fit when all independent factors are involved against knowledge sharing among LS for

further analysis to be conducted on the strategies to determine their influence on knowledge sharing. This means that the variables have a positive effect in the dependent variable and therefore cannot be ignored as a contribution to the study.

Table 4.3: ANOVA

ANOVA ^a									
Model		Sum of Squares df Mean So		Mean Square	F	Sig.			
1	Regression	3.601	3	1.200	6.665	.0001 ^b			
	Residual	19.090	106	.180					
	Total	22.691	109						

a. Dependent Variable: Knowledge sharing

b. Predictors: (Constant), Challenges of knowledge sharing practices in the library, Library knowledge sharing strategies service delivery to client's satisfaction, Effect of knowledge sharing.

The F-ratio in the ANOVA tests whether the overall regression on knowledge sharing model is a good fit for the data. The ANOVA table shows that the independent variables significantly predict the dependent variable, F (3,106) = 6.665, P-value<0.0001) at 95% confidence interval. The overall model has good fit when all independent factors are included and father analysis to determine each independent factor contribution is recommended.

Table 4.32: Coefficients^a

	Coefficie	ents ^a			
Model	Unstandardized Coefficients		Standardized	T	Sig.
			Coefficients		
•	В	Std.	Beta	-	
		Error			
1 (Constant)	3.134	.420		7.454	.0001
Library knowledge sharing	4.280	.064	0.391	4.364	.0001
strategies service delivery to					
client's satisfaction					
Effect of knowledge sharing	2.180	.134	0.176	2.347	.018
Challenges of knowledge sharing	-1.050	.084	-0.478	-2.597	.012
practices in the library					
a. Dependent Variable: Knowledge sharir	ng				

The effects of knowledge sharing, library knowledge sharing strategies, service delivery to clients' satisfaction, and Challenges of knowledge sharing practices in the library had a statistically significant influence on Knowledge sharing at a 95% confidence interval at a P-value <0.05 level of significance on the overall summary model. Library knowledge sharing strategies service delivery to client's satisfaction, Effect of knowledge sharing, Challenges of knowledge sharing practices in the library significantly influenced knowledge sharing model. However, actors hindering knowledge sharing practices in the library had a negative influence on the model.

4.13 Knowledge sharing Policy

The study sought to find out whether there is a policy in place to guide in knowledge sharing among LS in public universities in Kenya especially Kiambu County. The question on the existence of a knowledge sharing policy in the respective universities libraries proved that the majority of the LS did not understand. Only (20%) of the respondents answered in the affirmative that their universities had a knowledge sharing policy. Despite LS denial of the existence of such a policy, the majority affirmed that it was important for a policy to be put in place.

It is important that experienced members of LS be given a chance to share out such knowledge so that in the event of their exit, the system is not hit in terms of the loss of knowledge. Knowledge leakage is a reality as observed in this survey and it can be prevented through careful planning put in place. Ensuring staff retention and continuity, enabling knowledge sharing platforms should be put in place with a substantive policy framework. The research surveyed the status of relevant institutional policy enactment against knowledge sharing and management. Knowledge leakage is a reality as evidenced in this survey and it can be prevented through careful planning to put in place solutions responsive of the loopholes through which it is expressed.

On knowledge retention, LS should improve the process documentation and record keeping that would help tap knowledge for future use. An explorative survey on procedures, manuals, functions and policies being used for various functions across the universities libraries revealed a number of them were indeed being used, like adherence to employment policy; facilitation to attend learning conferences and exit interviews to

get cases of issues. When proper policy structures are in place, as far as knowledge sharing and management is concerned, it ensures that there is a flow and a system of knowledge transfer from more experienced members of the library in universities, unto those in need of such knowledge internally.

Failure to institutionalize knowledge sharing policies by the university libraries can lead to setbacks especially, during resignation, death, dismissal, and transfer of members of staff occur. The policies, procedures, manuals and processes when put in place need to be organized alongside available hierarchical structures, to ensure documentation, and even encourage the creation of forums for knowledge sharing.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the findings, conclusions, recommendations and openings for further research. It begins with a summary of the research. The chapter also gives a detailed discussion of the study findings as by the research objectives and the conclusion drawn in view of the discussion to the research question.

5.1 Summary of Findings

This section presents the summary of the findings presented in this section, as per the objectives of the study.

5.1.1 Types of knowledge shared among LS in public university libraries in Kiambu County Kenya.

From table 4.7 above the results indicates that a majority of the librarians' ranked embedded knowledge (130) as the preferred type of knowledge used by LS in the work place as reflected in the sharing encounters, explicit knowledge was ranked second at (102) and tacit knowledge was ranked third at (91).

Most Library Staff shared embedded knowledge while executing their duties, because knowledge from one process incorporated into another. This type of knowledge is normally found in structures, routines, processes, products, and artefacts, through library management initiative to formalize certain valuable routine used in the library using tacit and explicit knowledge. Embedded knowledge requires strictly following to be effective in terms of rules and regulations, which provide direction and promote standardization

of operational procedures. Knowledge locked within the sources needs to be shared with relevant users. Library staff share this type of knowledge regularly because it is recorded.

Explicit knowledge is expressed using a system of symbols, making it to be easily communicated either in rule-based or object-based. Explicit knowledge management systems are quite transparent and therefore easy to replicate thus cannot be the source of sustained long-term competitive advantage. Library staff majorly share routine duties unlike individual expertise in them.

Tacit knowledge is unwritten and hidden knowledge, which exists in the minds of library staff, it is gained through experience and involvement with other library staff, in comparison to explicit knowledge, it is difficult to share it to other staff. This type of knowledge is characterized by experience, expertise and skills of an individual, which are difficult to describe with language, to document and store. Library staff use tacit knowledge as a weapon to stay at strategic areas because they keep to themselves. They also fail to share knowledge to gain favours like promotion, contract and other rewards. There needs a policy to be in place regarding knowledge sharing.

5.1.2 Knowledge sharing methods among Library staff in Public Universities in Kiambu County, Kenya

The results from table indicates that the staff had different understanding of strategies of knowledge sharing with a mean of 4.69 strongly agreed that knowledge can be shared through work groups. Work groups are Sections where activities are grouped according to logic of similarity in work functions staff have similar roles and job assignments. A

mean of 4.59 agreed that knowledge can be shared through library database, documenting operational knowledge assist LS to internalize their experiences, thus enriching their tacit knowledge. Databases, which are integrated systems in the library facilitate the sharing and transferring of explicit knowledge to other staff, indirectly by transferring experiences of others. A mean of 4.43 agreed that knowledge can be shared through project teams, a mean of 4.37 agreed that knowledge could be shared through communities of practice respectively.

This implies that respondent agreed that some of the strategies such as work group, project teams and communities of practice were available but informal networks, strategic communities and learning communities were neutral this may be because of lack of knowledge as to how they work in KS in the library. Libraries are realizing that they need people-focused strategies in which LS are able to interact virtually to facilitate the sharing of tacit knowledge. KS in project teams are temporary in nature and new knowledge gained may be lost when the team disbands if there were no systems in place to capture and disperse the knowledge that reside within the project team falls.

The knowledge sharing strategies factors that had a statistically significant influence on library knowledge sharing at 95% confidence interval were; library knowledge sharing among working groups, library knowledge sharing among project teams, library knowledge sharing among learning community, library knowledge sharing among informal network and library knowledge sharing among community of practice that have P-value less 0.05. Work groups, project teams, learning community, informal network and community of practice (CoPs) were strategies available influencing the knowledge-sharing model.

There is knowledge sharing among library staff to some extent depending on the section of library that you are working, however other sections like IT, reference and processing staff are not ready to share their expertise in order to remain un touched when reshuffle is being done. Each section has a list of activities and procedure of doing work, which is shared in case of transfer or resignation. Exit minutes are also filled in the librarian's office and the soft copy of procedures are kept in the library database.

5.1.3 The effects of knowledge sharing among LS in Public Universities in Kiambu County, Kenya

The results revealed that technological growth with a mean 4.36, the respondents strongly agreed to trust with a mean of 4.33, of the respondents strongly agreed to attitude. Lack of interaction between those who need knowledge and those who can provide knowledge with a mean of 4.22, the respondents affirmed to commitment with a mean 4.19, the respondents strongly agreed to image. The LS reputation is a crucial factor for people to engage in knowledge sharing. When LS are willing to engage in activities that would promote their image as compared to monetary value, thus they can freely share knowledge because of positive self-esteem. Opinion or lack of resources with a mean of 4.14, the respondents agreed to behavioral control with a mean of 4.04, the respondents strongly agreed to loss of power. Staff are afraid to share knowledge because they will lose knowledge power in the library if they share knowledge with other LS. Fear of knowledge being miss-used by taking unjust credit for had a mean of 4.01, the respondents agreed to knowledge capturing/codification; give information about it with a mean of 3.82. The respondents agreed to lack of participation with a mean of 3.79, the respondents agreed to lack of opportunity for education and training with a mean of 3.72, the respondents agreed to retention of highly skilled and experienced staff is not a high priority in the library with a mean of 3.63. The respondents disagreed to lack of rewards and recognition systems that would motivate staff to share knowledge with a mean of 3.31, the respondents agreed to efficiency. Ability to work well with a mean of 3.22, the respondents disagreed to lack of formal and informal activities to cultivate culture of knowledge sharing with a mean of 3.19, the respondents disagreed to subjective norms; physical working environment and layout of work areas restrict effective knowledge sharing in my workplace with a mean of 3.04.

The implications of the study on the effects of KS in libraries is that majority strongly agreed that the constructs of KS had a positive effect of library service delivery with a mean of 3.04 disagreeing. When senior and knowledgeable staff leave the library, they take with them knowledge that afforded the library a competitive advantage, for example, extensive personal relationships with decision-makers in major customer organizations. The study therefore confirms that KS has an influence on how planning, management and execution library services.

Attitude; lack of interaction between those who need knowledge and those who can provide knowledge, trust, Subjective Norms; Physical working environment and layout of work areas restrict effective knowledge sharing in my workplace. Efficiency, ability to work well, technological growth, Lack of participation, lack of formal and informal activities to cultivate culture of knowledge sharing and retention of highly skilled and experienced staff is not a high priority in the library factors found to have significant influence on knowledge sharing model.

Due to technological growth, trust, image, loos of power and Knowledge capturing/codification staff were not ready to share their in-depth knowledge for fear of being outshined by junior staff. Library staff with rich knowledge which if shared will improve service delivery only if there are rewarded when sharing with other staff. When working environment is not conducive, Library staff fail to share knowledge lowering service delivery.

5.1.4 Challenges of knowledge sharing by LS in Public Universities in Kiambu County, Kenya

The study results revealed that a mean of 4.321 of the respondents strongly agreed that trust is a major challenge to knowledge sharing. Trust in KS can be a risk, it can be used as a weapon against them, leading to success or failure of knowledge sharing. A mean of 4.263 strongly agreed of leadership, senior library staff fear being outshined by their juniors thus keeping knowledge for themselves. A mean of 4.314 of respondents strongly agreed of social interaction ties, experienced (expert) LS choose who to associate with depending on level of education. A mean of 4.141 respondents agreed on identification, expert LS take advantage of being an-authority in a particular area, a mean of 3.994 respondents agreed on facilitation, LS take advantage of rewards before sharing their experience with other staff.

A mean of 3.877 of the respondents agreed of communications as a factor hindering knowledge sharing and with a mean of 3.827 agreed of co-ordination as challenge of knowledge sharing distribution. A mean of 3.353 respondents were neutral on organization culture, and with a mean of 3.314 respondents on organization structure

respectfully, senior staff take pride of office and position in organization structure to scare away those in junior position whom they can share knowledge. The pattern of the findings implies that trust, leadership, Social interaction ties, Identification and facilitation factors majorly hinder knowledge sharing among LS in Public universities, however Organization Culture issues don't affect the success of knowledge sharing among LS.

The pattern of the findings implies that trust, leadership, Social interaction ties, Identification and facilitation factors majorly hinder knowledge sharing among LS in Public universities, however Organization Culture issues don't affect the success of knowledge sharing among LS. Lack of collaborations is an obstacle to KS success. Junior library staff are often reluctant to share their knowledge and ideas with senior staff, as they feel that there will be no benefit of the situation for example promotion, rewards and juniors outshining the seniors. Senior staff use their knowledge to work against them marketing their ideas in their working activities.

Another challenge is LS unwillingness to change and trust fellow colleagues because of fear to be outshined by others, motivating the importance of knowledge sharing policies to facilitate the collection, development and dissemination of knowledge within the University libraries which is not considered because of fear of job loose.

5.1.5 Proposed strategies to enhance knowledge sharing among LS in public universities in Kiambu County, Kenya.

The following strategies storytelling, staff training, knowledge repositories, job rotation and performance evaluation were proposed by the respondents as lagging behind in knowledge sharing among LS.

5.1.5.1 Storytelling; From the study majority of the LS ranked storytelling at 97% (142) as the most preferred proposed strategy for knowledge sharing among LS. Storytelling strategy enables LS to learn through other staffs experiences, whereby the staff who attends a training session given the opportunity to disseminate the knowledge gained to others within the library. This are in-depth discussion of what happened during and after completion of a project or workshop to capture what lessons learnt during the entire activity to impart tacit knowledge from one staff to another.

5.1.5.2 Staff training; Staff training was ranked second at 96% (140) respondents, mainly to update their skills, promote knowledge sharing through the exchange of experiences and new ideas. Due to regular changes in information communication technologies (ICTs) some LS lacked IT competencies in using ICTs for knowledge sharing purposes. This revealed that staff training as a strategy for knowledge sharing are limited in university libraries and libraries needed to regularly address the need for basic skills and training necessary on the ground in library operations.

5.1.5.3 Knowledge repositories; Knowledge repositories was third with 95% (138) respondents who proposed it as a strategy for knowledge sharing, facilitating the documentation of appropriate operational knowledge in order to diminish attrition

encounters and assist new staff in the learning. Integrated systems such as databases, internet and knowledge management systems facilitate the sharing and transferring of explicit knowledge to other LS, thus transferring experiences of other staff indirectly.

5.1.5.4 Job rotation; From the study Job rotation for staff at 92% (134) respondents proposed it as a strategy for knowledge sharing and improving professional skills of LS through sharing of experiences and expertise. LS believe that job rotation gives them an opportunity to gain a wider picture of the whole operations in the library, which requires more energy and courage to learn new things. Job rotation among library assistants increases motivation to share knowledge on technical skills between different areas of the library services.

5.1.5.5 Performance evaluation; Performance evaluation and appraisal Strategy was ranked at 66% (97) respondents below others. This implies that most LS did not understand that performance evaluation and appraisal strategy can be used to share knowledge because the relationships between library staff practices on individual knowledge sharing. They found out that staff willingness to share knowledge depended on assessments costs and benefits. This contradicts study revealing that rewarding and recognizing LS contributions sent a strong signal to the LS that the institution valued knowledge sharing.

5.2 Conclusions

The 21st Century economy recognizes knowledge as the primary resource for wealth generation for competitive advantage, survival of the economy depends on knowledge creation, transfer and its maximum exploitation. Knowledge remains the greatest asset

owned by LS in universities, most universities have not recognized that knowledge sharing enhances institutional performance. The study therefore should be the base for the two universities to create an environment where knowledge is shared to enhance performance and growth in public universities libraries.

The types of knowledge shared among LS in public university libraries in Kiambu County Kenya most LS shared embedded knowledge while executing their duties, because knowledge from one process incorporated into another. Knowledge locked within the sources was not effectively shared with relevant users. The study concluded that knowledge generated was not subsequently shared among staff. LS used the acquired knowledge as a weapon to survival and as a way to stay in technical or strategic areas where other LS has no in-depth knowledge. The Explicit knowledge is expressed using a system of symbols, making it to be easily communicated either in rule-based or object-based. They also considered the sharing of their experiences and knowledge as a form of exploiting their expertise, thus giving them a competitive advantage over the other staff. A key aspect that impedes organizational efforts is the reluctance of employees to share their knowledge, especially when knowledge ownership is a part of their professional profiles

Tacit knowledge is unwritten and hidden knowledge, in the minds of library staff, in form of experience, expertise and skills of an individual, which are difficult to describe with language, to document and store, used by library staff as a weapon to stay at strategic areas because they keep to themselves. They also fail to share knowledge to gain favour's like promotion, contract and other rewards. The Library management needs to have a policy in place regarding knowledge sharing. All sections in the library

should complement each without giving prevalence to some sections as compared to others. The working environment in the library should accommodate all because they end up to serving one common goal/purpose.

Knowledge sharing methods among Library staff in Public Universities in Kiambu County, Kenya implies that respondent agreed that some of the methods such as work group, project teams and communities of practice were available at work places. The study concluded that, the methods of sharing knowledge sharing available motivated individual factors such as personal values, beliefs and norms. The library staff need to integrate the culture of knowledge sharing through merging of all library operations to neutralize the different expectations and uncertainties among library staff, which has limited knowledge sharing among staff.

The effects of knowledge sharing among LS in Public Universities in Kiambu County, Kenya is that majority agreed that the constructs of knowledge sharing had a positive effect of library service delivery. The study therefore confirms that knowledge sharing has an influence on planning, management and execution of library services. When staff, are driven by individual desires brought about by technological growth, trust, image, loos of power and Knowledge capturing/codification, staff would not be ready to share their in-depth knowledge for fear of being, outshined. The LS need to have a positive attitude towards knowledge sharing, new opportunities and innovations to generate an atmosphere within the library resulting in higher degree of success for both the organization and librarians while responding to environmental changes and service delivery.

The challenges of knowledge sharing by LS in Public Universities in Kiambu County, Kenya the pattern of the findings implies that trust, leadership, Social interaction ties, Identification and facilitation factors majorly hinder knowledge sharing among LS in Public universities, however Organization Culture issues don't affect the success of knowledge sharing among LS. Another challenge among LS unwillingness to change and trust fellow colleagues because of fear to be outshined by others stresses the importance of knowledge sharing policies to facilitate the collection, development and dissemination of knowledge within the University libraries which is not considered because of fear of job loose. This facilitated by lack of policy, awareness of vision and goals, top management support, poor ICT infrastructure, mistrust among staff, cultural differences and fear of retrenchment hindering service delivery.

The proposed strategies for enhancing knowledge sharing among LS in public universities in Kiambu County, Kenya found out that staff willingness to share knowledge depended on assessments costs and benefits. This contradicts study revealing that rewarding and recognizing LS contributions sent a strong signal to the LS that the institution valued knowledge sharing about work-related matters thus leading to general conclusion. That putting in place strategies such as performance evaluation system, resources, policies and accessible infrastructure would motivate staff to share their knowledge and experiences. However, lack of appropriate library strategies, for knowledge sharing practices, motivational rewards and the effects of knowledge sharing has cropped to low level of knowledge sharing among staff in the two public university libraries surveyed in Kiambu County. The top library management should encourage their staff to share knowledge by acting as role models by sharing knowledge across the

library staff. Finally, that there are no enabling knowledge sharing strategies in place to promote knowledge sharing. Knowledge sharing among staff, improved by implementing knowledge sharing strategies that can motivate staff to contribute and share their tacit knowledge. The library management should value all sections and staff as equal regardless where you are working, position, qualification

5.3 Recommendations

Based on the current study findings, these studies recommended in order to improve KS in the public Universities, there is a need to promote the librarian's attitudes and knowledge sharing by staff inside and outside the library to achieve service delivery the following recommendations;-

- The library to aggressively train its staff on the importance of information sharing since it has a positive effect on the overall performance of library services.
- 2. Library training policy to be implemented and to include periodical staff rotation in the library.
- The university library management need to put in place procedures that will guide individual to share information, this will lead to improvement of individual productivity.
- 4. The University need to improve the knowledge management systems not only to include internet but also other systems like emails, data warehouse and routine decision making.

5.4 Suggestions for Further Research

The study restricted itself to the predetermined objectives and scope that it was only able to cover knowledge sharing among LS in public Universities in Kiambu thus did not exhaustively cover all public universities. There is need to conduct a comparative study on Knowledge sharing among LS in all public universities and private Universities of Kenya since surveys indicate that no many studies have been undertaken on the same line.

REFERENCES

- Kuteyi, C. (2012). Knowledge transfer in organizations: Learning from the experience of others. *Organizational Behavior and Human Decision Processes*, 82(1), 1–8.
- Tetra Images, (2015). Creating a knowledge-sharing culture. *Knowledge sharing*, 4(5), 6-9. 47
- Olohan, M. (2017). Knowing in translation practice. *Translation Spaces*, 6(1), 159-180.
- Fullwood, R., Rowley, J., & McLean, J. (2018). Exploring the factors that influence knowledge sharing between academics. *Journal of Further and Higher Education*, 43(8), 1051-1063.
- Nonaka, I., & Toyama, R. (2015). The knowledge-creating theory revisited: knowledge creation as a synthesizing process. In The essentials of knowledge management. London: Palgrave Macmillan.
- Mallasi, H., & Ainin, S. (2015). Investigating knowledge sharing behaviour in academic environment. *Journal of Organizational Knowledge Management*, 1-19.
- Seonghee, G. & Boryung, S. (2008). Inter-organizational knowledge transfer through

 Malaysia e-government IT out-sourcing A theoretical review. World

 Academy of Science, Engineering and Technology, 42, 183-192.
- Harinarayana, C. & Raju, E. (2010). Academic Libraries in Transition Challenges Ahead. *Proceedings World Library Summit*, (pp. 1-10). Singapore.

- CARLA, (2012). *Knowledge sharing: a review of the literature*. Operation Evaluation Department Working Paper. World Bank.
- Mutilib, N., Chaudhry, A., Majid, S., & Logan, E. (2020) Librarians do fly: strategies for staying aloft. *Library Management*, 29(1/2), 41-50.
- Huff, N. (2011). Agrawal, V., Muhammed, S. & Thatte, A. (2008). Enabling knowledge sharing through intrinsic motivation and perceived IT support. *Review of Business Information Systems-Third Quarter*, 12(3), 21-36.

Prey et al. (2016)

- Ranjbarfard, M. (2016). Customer Knowledge Management Maturity Model for insurance sector. *International Research Journal of Applied and Basic Sciences*, 10(7), 938-951.
- Gabriel, A. S., Cheshin, A., Moran, C. M., & van Kleef, G. A. (2016). Enhancing emotional performance and customer service through human resources practices: A systems perspective. *Human Resource Management Review*, 26(1), 14-24.
- Abdullah, R., Selamat, M. H., Jaafar, A., Abdullah, S., & Sura, S. (2008). An empirical study of knowledge management system implementation in public higher learning institution. *International Journal of Computer Science and Network Security*, 8(1), 281-290.
- Aboelmaged, G. M. (2012). Harvesting organizational knowledge and innovation practices. *Business Process Management Journal*, *18*, 712-734.

- Adeeko, C. O. & Adetimirin, A. (2021). Use of Library Resources and Services among Undergraduates in Nigerian Universities. *Library Philosophy and Practice* (*e-journal*).6122. https://digitalcommons.unl.edu/libphilprac/6122
- Adomi, E. E. (2006). Job rotation in Nigerian university libraries. *Library Review, Adult education quarterly, 50*, 197-211.
- Agarwal, N. K., & Islam, M. A. (2014). Knowledge management implementation in a library Mapping tools and technologies to phases of the KM cycle. *VINE*, 44(3), 322-344.
- Akhavan, P. & Hosseini, S.M. (2016). Social Capital, knowledge sharing, and innovation capability: an empirical study of Rand D teams in Iran, *Technology Analysis and Strategic Management*, 28(1), 96-113.
- Akparobore, D. (2015). Knowledge sharing among librarians in university libraries in Nigeria. In *Information and knowledge management*, *5*(2), 31-35.
- Akpoiroro, R. M. & Okon, J. E. (2015). Students' satisfaction with service delivery in federal universities in South-south geo-political Zone, Nigeria.

 International Journal of Educational Administration and Policy Studies, 7(5). Retrieved from http://www.academicjournals.org/journal/IJEAPS/article-full-text- pdf/CA17A6854386
- Akramet, K., Siddiqui, S. H., Nawaz, M.A., Ghauri, T. A. & Cheema, A. K. M. (2011).

 Role of knowledge management to bring innovation: An Integrated Approach. Retrieved from http://www.eurojournals.com
- Alavi, M., & Leidner, D. E. (2001). Review: Knowledge sharing and Knowledge sharing Systems: Conceptual Foundations and Research Issues. *MIS Quarterly*, 25(1), 107-136. Retrieved from: http://www.jstor. Org /stable /3250961.

- Ali, P. N., & Khan, D. (2016). Behavioural Mechanism of Knowledge Sharing Pattern among Research Scholars. *In Proceedings of the International Conference on Digital Libraries*, (pp. 785-798). New Delhi: TERI.
- Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. Information and Management. https://doi.org/10.1016/j.im.2016.10.005
- Aranda, D. & Fernandez, L. (2002). Determinant of innovation through a knowledge-based theory. *Journal for Knowledge sharing*, 102(5), 289-296.
- Atwood, C.G. 2009. *Knowledge management basics*. The American Society for training and development, Alexandra: ASTD Press.
- Babbie, E., 2004. *The practice of social research*. (10th ed.). Australia: Thomson Learning.
- Balubaid, M. A. (2013). Using Web 2.0 Technology to Enhance Knowledge Sharing in an Academic Department. Retrieved from www.sciencedirect.com
- Bari, M.W., Ghaffar, M. & Ahmad, B. (2020). Knowledge-hiding behaviors and employees' silence: mediating role of psychological contract breach, *Journal of Knowledge Management*. doi: 10.1108/JKM-02-2020-0149.
- Biranvand, A., Seif, M., & Khasseh, A. A. (2015). Knowledge sharing among librarians in public libraries of Fars Province, Iran. *Library Philosophy and Practice*, *1*, 1259.
- Blankenship, S. S., & Ruona, W. E. A. (2007). Professional learning communities and communities of practice: A comparison of models. In F. Nafukho (Ed.), *AHRD 2007 International Conference Proceedings* (pp. 888-895). Indianapolis, IN: Academy of Human Resource Development.

- Bock, G.-W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29(1), 87-111.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Brown, J. S., & Duguid, P., (1998). Organizing Knowledge, California Management Review 1998 40(1): 90-111. Republished in Reflections 1999 (1)2: 28-44, with commentaries by Wanda 1. Orlikowski and Etienne Wenger.
- Bukowitz, W., & Williams, R. (1999). *The Knowledge sharing Fieldbook*, New York: Financal Times/Prentice Hall.
- Cabrera, E. F. & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *International Journal of Human Resource Management*, 16(5), 720-735.
- Casey, M. E. & S. C. (2010). Library 2.0: service for the next-generation library. *Library Journal*, 131(14), 40 42 Retrieved from http://lj.libraryjournal.com/2010/05/technology/library-2-0/
- Chiu, C.-M., Hsu, M.-H., & Wang, E. T. G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42(3), 1872-1888.
- Coleman, J. (1990). *Foundations of social theory*. Cambridge, MA: Harvard University Press.
- Connelly, C. E., & Kelloway, E. K., (2003). Predictors of employees. Perceptions of knowledge sharing cultures. *Leadership and Organization Development Journal*, 24(5/6), 294-301.

- Creswell, J.W. (2014). Research design: qualitative, quantitative and mixed methods approaches, (4th ed.). Los Angeles: Sage.
- Cummings, J. N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. *Management Science*, 50(3), 352-364.
- Daniel, A. (2015). Knowledge Sharing Among Librarians in University Libraries in Nigeria, Abraka: Delta State University.
- Davenport, T. & Volpel, S. (2001). The rise of knowledge towards attention management, *Journal of Knowledge sharing*, 5(3), 212–221.
- Davenport, T. H., & Prusak, L. (1998). Working knowledge: How organizations manage what they know. Harvard: Harvard Business Press.
- Deka, A. &, Subaveerapandiyan, A. (2021). Understanding the Knowledge Sharing Behaviors of Library Professionals in South Asia, *Library Philosophy and Practice*, 12-31. Retrieved from https://digitalcommons.unl.edu/libphilprac/6352
- Del Giudice, M. & Della Peruta, M.R. (2016). The impact of IT-based knowledge management systems on internal venturing and innovation: a structural equation modeling approach to corporate performance, *Journal of Knowledge Management*, 20(3), 484-498.
- Dentakos, S. (2020). Do you know what you don't know?" Exploring monitoring accuracy across domains of general knowledge, financial calculation, and probability calculation.
- Duke, A., Goodman, J., Treadway, D., & Breland, J. (2009). Perceived Organizational Support as a Moderator of Emotional Labor/ Outcomes Relationships. *Journal of Applied Social Psychology*, 39(5), 1013-1034.

- Earney, S. & Martins, A. (2009). Job rotation at Cardiff University Library Service: a pilot study. *Journal of Librarianship and Information Science*, 41(4), 213-226.
- Elfil, M., & Negida, A. (2017). Sampling methods in clinical research; an educational review. *Emergency*, *5*(1), 1-5.
- Etimo, F.C. (2010). Library and information science perceptive: a compendium of researches of Felicia Edu-Ewem Etim. Akwa Ibom: Nigeria Library Association
- Fong, P. S. W. (2003). Knowledge creation in multidisciplinary project teams: Anb empirical study of the processes and their dynamic relationships. *International Journal of Project Management*, 21(7), 479-486.
- Foss, N. J., Husted, K., & Michailova, S. (2010). Governing knowledge sharing in organizations: Levels of analysis, governance mechanisms, and research directions. *Journal of Management studies*, 47(3), 455-482.
- Gabbard, J. L. (2018). Factors that affect scientists' knowledge sharing behavior in health and life sciences research communities: differences between explicit and implicit knowledge. *Computers in Human Behavior*, 78, 326-335.
- Gamble, P.R., & Blackwell, J. (2001), *Knowledge sharing: A State-of-the-Art Guide*, New York: Kogan Page Ltd.
- Goh, H.T.C., & Hooper, V. (2009). Knowledge and information sharing in a closed information environment. *Journal of knowledge management*, 13(2), 21-34.
- Hakim, A. (2013). Strategi Knowledge Management pada PLN APJ Kediri: Studi Deskriptif strategi knowledge management dan Pengetahuan yang tersedia pada PLN APJ Kediri. *Librinet*, 2(1).

- Haldin-Herrgard, T. (2000). Difficulties in diffusion of tacit knowledge in organizations. *Journal of Intellectual capital*, *1*(4), 357-365.
- Han, B. M., & Anantatmula, V. S., (2007). Knowledge sharing in large IT organizations:

 A case study. *The journal of information and knowledge sharing systems*,

 Emerald Group of Publishing Limited, 37(4), 421-439.
- Hatch, M. J. (1997). Organization theory. New York: Oxford University Press.
- Hau, Y., Kim, B., & Lee, H. (2016). What drives employees to share their tacit knowledge in practice? *Knowledge Management Research & Practice*, 14(3), 295-308.
- He, W., & Wei, K.-K. (2009). What drives continued knowledge sharing? An investigation of knowledge-contribution and –seeking beliefs. *Decision Support Systems*, 46(4), 826-838.
- Hendriks, P. H. (2001). Many rivers to cross: from ICT to knowledge sharing systems. *Journal of Information Technology*, 16(2), 57-72.
- Hendriks, P., (1999). Why share knowledge? The influence of ICT on the motivation for knowledge sharing. *Knowledge and Process Management*, 6(2), 91-100.
- Hlatshwayo, A. M. (2017). *Indigenous knowledge, beliefs and practices on pregnancy and childbirth among the Ndau people of Zimbabwe*, Unpublished PhD dissertation, Zimbabwe: University of Zimbabwe.
- Hooff, B. v. d., & Huysman, M. (2009). Managing knowledge sharing: Emergent and engineering approaches. *Information & Management*, 46(1), 1-8.
- Irdiani, A. (2012). Peran knowledge sharing di kalangan karyawan. *Librinet,l, 1*(1).

- Jackson, S., E., DeNisi, A., & Hitt, M., A. (ed) (2003). Managing knowledge for sustained competitive advantage: designing strategies for effective human resource management, New York: John Wiley and Sons.
- Jain, K. K., Manjit, S. S, & Gurvinder, K. S. (2005). Knowledge sharing among academic staff: a case study of business schools in Klang Valley, Malaysia. *JASA*, 2, 23-29.
- Jarvi, M. & Uusitalo, T. (2004). Job rotation in nursing: a study of job rotation among nursing personnel from the literature and via a questionnaire. *Journal of Nursing Management*, 12(5), 337-347.
- Jen, C.C. & Wen, J. (2009). Strategic human resource practices and innovation performance the mediating role of knowledge management capacity. *Journal of business research*, 62,108 112.
- Johnson, W. L., Johnson, A. M., & Heimberg, F. (1999). A primary and second order component analysis of the organizational identification questionnaire. *Educational and Psychological Measurement, 59*(1), 159-170.
- Jones, M. C., Cline, M., & Ryan, S. (2006). Exploring knowledge sharing in ERP implementation: an organizational culture framework. *Decision Support Systems*, 41(2), 411-434.
- Jonsson, A. (2008). A transnational perspective on knowledge sharing: lessons learned IKEA's entry into Russia, China and Japan, The International Review of Retail, *Distribution and Consumer Research*, 18(1), 17-44.
- Jonsson, A., & Tell, F. (2013). Knowledge sharing, in Strannegard, L., & Styhre, A. (Eds.): Management: An advanced introduction. Lund: Student literature.
- Kabita, E., Kwanya, T., & Mbenge-Ndiku, T. (2021). Knowledge Sharing Strategies between Coffee Farmers and Coffee Research Institute: A Case Study of Gitwe Farmers' Co-Operative Society.

- Kankanhalli, A., Tan, B. C. Y., & Wei, K. K. (2005). Contributing knowledge to electronic knowledge repositories: An empirical investigation. *Mis Quarterly*, 29(1), 113-143.
- Kaushik, M., & Mathur, B. (2014). Data analysis of students marks with descriptive statistics. *International Journal on Recent and Innovation Trends in computing and communication*, 2(5), 1188-1190.
- Kebede, G. (2010). Knowledge management: An information science perspective. *International journal of information management*, 30(5), 416-424.
- Keyes, J., (2008). Identifying the Barriers to Knowledge sharing in Knowledge Intensive Organizations. Retrieved from www.newarttech.com /Knowledge Sharing.pdf
- Khalid, K. S. & Mahmood, A. K. (2008). Government employee perception on the usage of storytelling approach to share knowledge in organization environment. *In the Proceedings of Knowledge Management International Conference*, 10-12 June 2008, Langkawi, Malaysia. Retrieved from www.kmice.uum.edu.my/kmice08/Paper/CR197.doc
- King, W. R., Chung, T. R., & Haney, M. H. (2008). Knowledge Management and Organizational. *Learning, Omega*, 36(2), 167-172.
- Kinicki, A., & Kreitner, R. (2006). *Organizational behavior: Key concepts, skills & best practices* (4th ed.). New York: McGraw-Hill Companies.
- Kirkwood, S.A. & Price, L. (2013). Examining s0me assumptions and limitations of research on the effects of emerging technologies for teaching and learning in higher education: Examining assumptions and limitations of research. *British journal of educational technology*, 44, 536 543.

- Kothari, C.R. (2019). *Research Methodology: Methods and Techniques*.(4th ed.). New Delhi: New age publications.
- Krackhardt, D., & Hanson, J. R. (1993). Informal networks: The company behind the charts. *Harvard Business Review*, 71(4), 104-111.
- Kulkarni, U. R., Ravindran, S., & Freeze, R. (2007). A knowledge sharing success model: Theoretical development and empirical validation. *Journal of Management Information Systems*, 23(3), 309-347.
- Lam, W., & Chua, A., (2005). The mismanagement of knowledge sharing. *Aslib Proceedings*, 57(5), 424-433.
- Lawal, W. O., Agboola, I. O., Aderibigbe N. A., Owolabi K. A. & Bakare, O. D. (2014). Knowledge sharing among academic staff in Nigerian university of agriculture: A survey. *International Journal of Information Library and Society*, 3(1) 69-80.
- Lee, P., Gillespie, N., Mann, L., & Wearing, A. (2010). Leadership and trust: Their effect on knowledge sharing and team performance. *Management Learning*, 41(4), 473-491.
- Lin, H.F. (2007). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of Information Science*, *33*(2), 135–149.
- Lines, B. C., Sullivan, K. T., & Wiezel, A. (2016). Support for organizational change: Change-readiness outcomes among AEC project teams. *Journal of Construction Engineering and Management*. *15*(2), 136-159.
- Ling, C.W. (2009). Knowledge sharing in an American multinational company based in Malaysia. *Journal of Workplace Learning*, 21(2), 125-142.

- Liu, N. C & Liu, M. S. (2011). Human resource practices and individual knowledge sharing behaviour: an empirical study for Taiwanese R&D professionals. *International Journal of Human Resource Management*, 22(4), 981-987.
- Majeed, M. T., & Khan, F. N. (2019). Do information and communication technologies (ICTs) contribute to health outcomes? An empirical analysis. *Quality & quantity*, 53(1), 183-206.
- Maravilhas, S. & Martins, J. (2019). Strategic knowledge management a digital environment: tacit and explicit knowledge in Fab Labs, *Journal of Business Research*, 94(c), 353-359.
- Martins, E.C. & Martins, N. (2011). The role of organizational factors in combating tacit knowledge loss in organizations. *Southern African business review*, 15(1), 49-69.
- Mayega, S. (2008). Library information services in the digital age, Paper presented at Fourth Shanghai International Library Forum, Shanghai, China. ELis. Retreived from http://hdl.handle.net/10760/12567
- McLeod, S. (2018). Questionnaire, Retrieved from; https://www.Simply psychology.org/questionnaires.html
- McLever, D., Lengnick-Hall, C., Lengnick-Hall, M. & Ramachandran, I. (2013). Understanding work and knowledge management from a knowledge-in-practice perspective, *Academy of Management Review*, 38(4), 597-620.
- Meyer, P., (2002). Improvisation power. Executive Excellence, 19(12), 17-18.
- Michailova, S. & Husted, K., (2003). Knowledge-sharing hostility in Russian firms. *California Management Review*, 45(3), 59-77.

- Minbaeva, D. B. (2013). Strategic HRM in building micro-foundations of organizational knowledge-based performance. *Human Resource Management Review*, 23(4), 378-390.
- Mosala-Bryant, N.N. & Hoskins, R.G., (2017). Motivational theory and knowledge sharing in the public service, *South African Journal of Information Management* 19(1), a772. https://doi.org/10.4102/sajim.v19i1.772
- Mosha, N.F, Holmner, M. & Penzhorn, C. (2015). Utilisation of social media tools to enhance knowledge sharing among knowledge workers: A case of Nelson Mandela African Institution of Science and Technology (NM-AIST), Arusha, Tanzania. Paper presented at: IFLA WLIC 2015 - Cape Town, South Africa in Session 180 - Knowledge Management.
- Muijs, D. (2012). *Surveys and sampling*. In Muijs, D., Briggs, A.R., Coleman, M and M. Morrison, eds. Research methods in educational leadership and management 3rd ed. Los Angeles: Sage.
- Murray, P., (2003). Knowledge sharing as a sustained competitive advantage. *Ivey Business Journal*, 66(4), 71-7.
- Mutula, S.M. & Jacobs, M.E. (2010). *Challenges of information illiterate first-year entrants for the University of Botswana*, Botswana: Sage.
- Nazim, M., & Mukherjee, B. (2012). Managing and sharing knowledge in academic libraries. *Journal of knowledge sharing practice*, 13(2).
- Nonaka, I., & Von Krogh, G. (2009). Perspective Tacit knowledge and knowledge conversion: Controversy and advancement in organizational knowledge creation theory. *Organization science*, 20(3), 635-652.
- Nove, E.W.A, & Puspitasari, D. (2013). Knowledge sharing in libraries: a case study of knowledge sharing strategies in Indonesian university libraries.

- O'Dell, C. & Hubert, C. (2011). If only we knew what we know: identification and transfer of internal best practices. *California Management Review*, 40(3), 154-74.
- Odini, C. (1991). Problems and prospects of resource sharing in developing countries.

 African Journal of Library. Archives and Information Science, 1(2), 93-98.
- Okonedo, S., & Popoola, S. O. (2012). Effect of Self-Concept, Knowledge Sharing and Utilization on Research Productivity among Librarians in Public Universities in South-West, Nigeria. *Library Philosophy & Practice*.
- Park, J. G., & Lee, J. (2014). Knowledge sharing in information systems development projects: Explicating the role of dependence and trust. *International Journal of Project Management*, 32(1), 153-165.
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd edition) Thousands Oaks: Sage.
- Paulin, D., & Suneson, K. (2012). Knowledge transfer, knowledge sharing and knowledge barriers three blurry terms in knowledge sharing, *The Electronic Journal of Knowledge sharing*, *10* (1), 81-91.
- Peariasamy, T. (2009). A study on the influence of performance reward on knowledge sharing, factors, barriers and recommendations. Retrieved from http://www.fppsm.utm.my/files/journal/JK 07/706.pdf.
- Rambur, N., & Sáenz, J. (2007). Promoting people-focused knowledge sharing: The case of IDOM. *Journal of Knowledge sharing*, 11(4), 72-81.
- Ramirez, A. (2007). To blog or not to blog: understanding and overcoming the challenge of knowledge sharing, Journal *of Knowledge Management Practice*, 8(1), 1-12.

- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge sharing* (e-journal), 9(3), 18-35.
- Rivera-Vazquez, J.C., Ortiz-Fournier, L.V. & Rogelio Flores, F. (2009). Overcoming cultural barriers for innovation and knowledge sharing", *Journal of Knowledge Management*, 13(5), 257-270.
- Roknuzzaman, M., & Umemoto, K. (2009). How library practitioners view knowledge sharing in libraries: A qualitative study. *Library Management*, 30(8/9), 643-656.
- Rotich, D. C., & Munge, E. M. (2007). An overview of electronic information resources sharing initiatives in Kenyan universities. *South African Journal of Libraries and Information Science*, 73(1), 64-74.
- Ruuska, I., & Vartiainen, M. (2005). Characteristics of knowledge sharing communities in project organizations. *International Journal of Project Management*, 23(5), 374-379.
- Šajeva, S. (2014). Encouraging knowledge sharing among employees: how reward matters; *Procedia Social and Behavioral Sciences*, *156* (2014), 130 134.
- Salant, P., Dillman, I., & Don, A. (1994). How to conduct your own survey (No. 300.723 S3).
- Salimderhaven, N., & Harzing, A.W. (2009). Knowledge-sharing and social interaction within MNEs. *Journal of International Business Studies*, 40(5), 719 741.
- Sandhu, M., Jain, K., & Ahmad, I. (2011). Knowledge sharing among public sector employees: evidence from Malaysia, *International Journal of Public Sector Management*, 24(3), 206-226.
- Sarrafzadeh, M. Martin, A. & Hazeri, A. (2010). Knowledge management and its potential applicability for libraries. *Library Management*, *31*(3), 198-212.

- Saunders, M.N.K., Lewis, P., & Thornhill, A. (2023). *Research methods for business students*. (19th ed). Harlow: Pearson education.
- Schermerhorn, J. R., Hunt, J. G., & Osborn, R. N. (1994). *Managing organizational behavior*. New York: Wiley.
- Shahid, A. & Alamgir, R. (2011). *ICT Enabled Knowledge Sharing Impact of ICT on Knowledge Sharing Barriers The Case of Avanade*, Unpublished Master Thesis, Malardelin: Malardelin University. EN UNIVERSITY
- Shanhong, T. (2000). Knowledge management in libraries in the 21st century. 66th IFLA Council and General Conference. Jerusalem-Israel 13-18 August. Retrieved from http://www.unlibrary.nairobi.org/PDFs/KMliraries 21st.pdf
- Shepherd, E. (2010). In-service training for academic librarians: a pilot programme for staff. *The Electronic Library*, 28(4), 507-524.
- Simonin, B., & Ozsomer, A. (2009). Knowledge processes and learning outcomes in MNCs: an empirical investigation of the role of human recourse practices in foreign subsidiaries. *Human Resource Management*, 48(4), 505–530.
- Singh, J.B., Chandwani, R. & Kumar, M. (2018). Factors affecting Web 2.0 adoption: exploring the knowledge sharing and knowledge seeking aspects in health care professionals, *Journal of Knowledge Management*, 22(1), 21-43.
- Sluss, D. M., Klimchak, M. & Holmes, J. J. (2008). Perceived organizational support as a mediator between relational exchange and organizational Identification. *Journal of Vocational Behavior*, 73(3), 457-464.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.

- Suppiah, V. & Sandhu, S. M. (2011). Organizational culture's influence on tacit 115 knowledge sharing behavior. Journal of Knowledge Management, 15, 462-477.
- Suresh, K., Thomas, S. V., & Suresh, G. (2011). Design, data analysis and sampling techniques for clinical research. *Annals of Indian Academy of Neurology*, 14(4), 287-290
- Sveiby, K.E. & Simons, R., (2002). Collaborative climate and effectiveness of knowledge work. *Journal of Knowledge sharing*, 6(5), 420-33.
- Świgoń, M. (2017). Knowledge sharing practices in informal scholarly communication amongst academics in Poland. *Malaysian Journal of Library & Information Science*, 22(2), 101-115
- Tarus, J.K., Gichoya, D. & Muumbo, A. (2015). Challenges of Implementing E-Learning in Kenya: A Case of Kenyan Public Universities, Athabasca University: IRRODL.
- TitiAmayah, A. (2013). Determinants of knowledge sharing in a public sector organization, *Journal of Knowledge Management*, 17(3), 454-471.
- Tiwana, A., & Bush, A. (2001). A social exchange architecture for distributed Web communities. *Journal of Knowledge Management*, 5(3), 242-249.
- Townley, C.T. (2001). Knowledge management and academic libraries. *College and Research Libraries*, 62(1), 44-55.
- Wamundila, S. & Ngulube, P. (2011). Enhancing knowledge retention in higher education: a case of the University of Zambia: original research. *South African Journal of Information Management*, 13(1), 1-9.
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human resource management review*, 20(2), 115-131.

- Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29(1), 35-57.
- Wellman, J. (2009). Organizational learning: How companies and institutions manage and apply knowledge. London: Springer.
- Wenger, E. (1999). Communities of practice and social learning systems. *Organization*, 7(2), 225-246.
- Wenger, E. C., & Snyder, W. M. (2000). Communities of practice: The organizational frontier. *Harvard Business Review*, 78(1), 139-145.
- Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice*. Boston: Harvard Business School Press.
- Wijetunge, P. (2012). Organizational storytelling as a method of tacit-knowledge transfer: case study from a Sri Lankan university. *The International Information and Library Review*, 44(4), 212-223.
- Wong, K. Y. (2005). Critical success factors for implementing KM in small and medium enterprises, *Industrial management and Data systems*, 105(3), 261 279. Retrieved from: (www. Emeraldinsight.com /0263.5577. html)
- Xiao, J. J. (2008). Applying behavior theories to financial behavior. *Handbook of consumer finance research*, 69-81.
- Yang, J. (2004). Job related knowledge sharing, comparative case study. *Journals of Knowledge sharing*, 8(3), 118-126.

APPENDICES

Appendix I: Letter of introduction

Dear Librarian,

Re: Request for Participation in Questionnaire for MSC Research Project

I am a MSc student at Kisii University conducting a research on knowledge sharing among Library Information Science Professionals in Public Universities in Kiambu County, Kenya. I have selected you as one of my respondents to facilitate in data collection and I will be glad if you will assist me to attain this end by filling the attached questionnaire. The questionnaire will take you very limited time to complete. The data collected will be used only for the purpose of this study and will be treated with utmost confidentiality. This study, when, eventually completed, will help the library appreciate the value of knowledge sharing in its overall performance and reduce any stereotype misconceptions that could have hindered effective application of KS among library personnel.

Thank you for your time and cooperation.

Joseph Lamech Ondieki

MSc information science

MIN12-20358-14

0719752833

Kisii University.

151

Appendix II: Questionnaire for Heads of Departments

Background Information
1. Please indicate the following appropriately:
Your university
Your designation
Please indicate you highest academic qualification
Diploma □
Bachelors
Masters
PhD in Librarianship and Information Science
Please respond to the following questions by ticking $[\sqrt{\ }]$ appropriately.
2. For how many years have you worked in the University library as head of department?.
(i) Less than 5 years []
(ii) 6 – 10 years []
(iii) 11-15 years []
(iv) over 15 years

3. How do you perceive the term Knowled	ge sharii	ng?					
4. On a scale of 1-5 how will you rate the f	Collowing	g statem	ent wh	nich ap	ply to	know]	ledge
sharing [KS] in your library? Please indic	ate the e	extent to	which	h you	agree	or disa	agree
with following statements by putting a tick	() in the	ne appro	priate				
1. Strongly Disagree 2. Disagree 3. Neutra	l 4 Agre	e 5. Stro	ngly A	Agree			
Statement			SD	D	N	A	SA
KS is an extension of library work							
In-house databases							
ICT infrastructure							
A process of creating, capturing, storing	g, sharir	ng and					
applying information for competitive advan	ntage						
Regular departmental meetings							
5. Which of the following Knowledge shar indicate the extent to which you agree or d tick (√) in the appropriate SA- Strongly Agree, A- Agree, N –Neutral	isagree v	with foll	owing	stater	ments b	by putt	
K.S. Strategies	SA	A	N		D	SD)
Work groups							
Project teams							
Learning community							
Strategic community							

Informal Network			
Learning Community			
Community of Practice (CoPs)			
Library database			

if any other strategies please indicate them?	
b. How do you come up with this strategies?)

6a). How does your library capture and acquire knowledge from external and internal clients? Please indicate the extent to which you agree or disagree with following statements by putting a tick $(\sqrt{})$ in the appropriate

SA- Strongly Agree, A- Agree, N-Neutral, D-Disagree, SD- Strongly Disagree

Statement	SA	A	N	D	SD
Capture					
Gathering internal profiles of academic librarians					
Standardized routine information and updated					
reports					
Customer based client system to capture references					
and responses					
Existence of a folder of frequently asked questions					
(FAQs)					
Discussion forums					
Acquisition					
Online databases Searching					

Buying knowledge products or resources in the			
form of manuals, blueprints, research reports and			
other reports			
Subscribing to litservs and online or virtual			
Communities of Practice			
Attending conferences, seminars, and workshops			
Networking with other libraries and with			
institutions of all kind			

6b). How does your library ensure it retains and shares knowledge of staff leaving the
library for greener pastures or through retirement?

7. a). What library management skills and expertise do you share with your colleagues? Please indicate the extent to which you agree or disagree with following statements by putting a tick ($\sqrt{ }$) in the appropriate box.

SA- Strongly Agree, A- Agree, N –Neutral, D –Disagree, SD- Strongly Disagree

Statements	S.A	A	N	D	S.D
Classification and cataloguing skills of library materials					
Online databases search skills					
Filing skills					
Shelving skills of library matrials					
Data entry skills					
Acquisitions of new materials skills					
Orientation skills					

Management skills									
Marketing skills									
Information literacy sk									
b). How does this Knowledge improve/ promote service delivery.									
					•••••				
		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••				
8. What knowledge shextent to which you ago the appropriate SA- Strongly Agree, A	gree or disagn	ree with follow	wing statemer	nts by puttin	g a tick $()$ in				
	SD	D	N	A	SA				
Forum									
Wikis									
E-mail									
Libraries web page									
Intranet									
Seminars									
Blogs									
Telecommunication									
Skype									
Face to face meetings									
b). How doe	es this	channels	support	service	delivery?				

9. What do you think are effects knowledge sharing in the library? Please indicate the extent to which you agree or disagree with following statements by putting a tick ($\sqrt{}$) in the appropriate box

Effect	SA	A	N	D	SD
Attitude; lack of interaction between those					
who need knowledge and those who can					
provide knowledge					
Commitment					
Trust					
Behavioural Control					
Subjective Norms; Physical working					
environment and layout of work areas					
restrict effective knowledge sharing in my					
workplace					
Efficiency; Ability to work well					
Knowledge capturing/codification; Give					
information about it.					
Image; opinion or Lack of resources					
Loss of power; Fear Knowledge being					
misused by taking unjust credit for it					
Technological growth					
Lack of participation					
lack of opportunity for education and					
training					
Lack of formal and informal activities to					
cultivate culture of knowledge sharing					
Lack of rewards and recognition systems					
that would motivate staff to share					
knowledge					
Retention of highly skilled and experienced					
staff is not a high priority in the library					

Kilowieuge						
Retention of highly skilled and experienced						
staff is not a high priority in the library						
How does the library deal with this effects service delivery?.	knowle	edge sha	ring in	order to	improv	e

10. a. Which of the following statements describes the culture of your library towards knowledge sharing practices? Please indicate the extent to which you agree or disagree with following statements by putting a tick $(\sqrt{})$ in the appropriate

SA- Strongly Agree, A- Agree, N-Neutral, D-Disagree, SD- Strongly Disagree

	SA	A	N	D	SD
The basic values and principles support					
knowledge sharing					
It is an open, encouraging and supportive					
culture					
Knowledge sharing is a teamwork and all					
must contribute					
The staff believe that knowledge sharing is					
good for newcomers only					

11. What factors which are hindering knowledge sharing practices in the library? Please indicate the extent to which you agree or disagree with the following factors which hindering knowledge sharing practices by putting a tick ($\sqrt{}$) where appropriate

Where SA- Strongly Agree, A- Agree, N –Neutral, D –Disagree, SD- Strongly Disagree

	SA	A	N	D	SD
Leadership					
Trust					
Organization Culture					
Organization Structure					
Communication					
Co-ordination					
Facilitation					
Social interaction ties					
Identification					

If any ot	her please spacify
12. How	will you handle this factors in order to promote service delivery?
_	you believe that knowledge sharing practice is a valuable tool in daily operations Library activities?
14. a). library?	Does the library have a policy in place governing knowledge sharing in the
Yes	
No	
b). How	does it state?
• • • • • • • • • • • • • • • • • • • •	•••••

15.	Which	of the	following	strategies	would	you	propose	to	enhance	knowledge	sharing
in y	your libi	rary?.									

S/No.	Strategy	Yes	No
1	Story telling		
2	Knowledge repositories		
3	Performance Evaluation and Appraisal Strategy		

Any other please specify	

Appendix III: Questionnaire for Library Assistants

Background Information 1. Please indicate the following appropriately: Your university Your designation..... Indicate you highest academic qualification, (You can tick all that you have achieved) Certificate □ Diploma □ Bachelors degree □ Master degree □ PhD in Librarianship and **Information Science** ☐ Other (please specify): Please respond to the following questions by ticking $\lceil \sqrt{\rceil}$ appropriately. 2. For how long have you worked in the University library? (i) Less than 5 years [] (ii) 5 – 10 years [] (iii) 10-15 years [] over 15 years Please respond to the following questions by ticking $\lceil \sqrt{\rceil}$ appropriately. 2. For how many years have you worked in the University library as head of department? (i) Less than 5 years [] (ii) 6 - 10 years [] (iii) 11-15 years [] (iv)over 15 years

3. What do you understand by the term k	Knowledge	e sharing	g?		
4. Which of the following Knowledge s	sharing m	ethods a	ire you c	organized a	and exist in
the library? Please indicate the extent t	to which	you agr	ee or dis	agree with	h following
statements by putting a tick $()$ in the app		,			
SA- Strongly Agree, A- Agree, N -Neutr	ral, D <i>–</i> Di	sagree, S	SD- Stro	ngly Disag	gree
K.S. Strategies	SA	A	N	D	SD
Work groups					
Project teams					
Learning community					
Strategic community					
Informal Network					
Learning Community					
Community of Practice (CoPs)					
Library database					
If any other strategies	-	1	1		
	• • • • • • • • • • • • • • • • • • • •				
	• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	
	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••

5. How do you learn and share knowledge from external and internal clients? Please indicate the extent to which you agree or disagree with following statements by putting a tick $(\sqrt{})$ in the appropriate

SA- Strongly Agree, A- Agree, N –Neutral, D –Disagree, SD- Strongly Disagree

Statement	SA	A	N	D	SD
Capture					
Collating internal profiles of academic librarians					
Standardized routine information-update reports					
Customer based client system that capture					
reference and responses					
Existence of a folder of FAQs					
Discussion forums					
Acquisition					
Online databases Searching					
Buying knowledge resources in the form of					
manuals, and blueprints					
Subscribing to litservs and online or virtual					
Communities of Practice					
Attending seminars, and workshops					
Networking with other libraries and Inter-library					

6. a). What management skills and expertise do you receive from your colleagues? Please indicate the extent to which you agree or disagree with following statements by putting a tick $(\sqrt{})$ in the appropriate box.

SA- Strongly Agree, A- Agree, N -Neutral, D -Disagree, SD- Strongly Disagree

Statements	S.A	A	N	D	S.D
Classification skills of library materials					
cataloguing skills of library materials					
Databases search skills					
Filing skills					
Shelving skills of library materials					
Data entry skills					
Acquisitions of new materials skills					
Orientation skills					
Management skills					
Marketing skills					
Information literacy skills					

). How has this skills and expertise helped you to improve service delivery?.								

7. How many ICT channels do you identify in the Library in knowledge sharing? Please indicate the extent to which you agree or disagree with following statements by putting a tick $(\sqrt{})$ in the appropriate

SA- Strongly Agree, A- Agree, N-Neutral, D-Disagree, SD- Strongly Disagree

	SD	D	N	A	SA
Forum					
Wikis					
E-mail					
Libraries web page					
Intranet					
Seminars					
Blogs					
Telecommunication					
Skype					
Face to face meetings					

ŕ		channels	11	J

8. On your opinion what are the effects knowledge sharing on your work? Please indicate the extent to which you agree or disagree with following statements by putting a tick $(\sqrt{})$ in the appropriate box

Effect	SA	A	N	D	SD
Attitude; lack of interaction between those					
who need knowledge and those who can					
provide knowledge					
Commitment					

Trust					
Behavioural Control					
Subjective Norms; Physical work					
environment and layout of work areas					
restrict effective knowledge sharing in my					
workplace					
Efficiency; Ability to work well					
Knowledge capturing/codification; Give					
information about it.					
Image; opinion or Lack of resources					
Loss of power; Fear Knowledge being					
misused by taking unjust credit for it					
Technological growth					
Lack of participation					
lack of opportunity for education and					
training					
Lack of formal and informal activities to					
cultivate culture of knowledge sharing					
Lack of rewards and recognition systems					
that would motivate staff to share					
knowledge					
Retention of highly skilled and experienced					
staff is not a high priority in the library					
h How does the library deal with this offer	.4. 1	المامم ماء		andan ta	:
b. How does the library deal with this effect	AS KHOW	leage si	aring in	order to	mprove
service delivery?.					

9. What is your understanding of Organization culture towards knowledge sharing practices? Please indicate the extent to which you agree or disagree with following statements by putting a tick $(\sqrt{})$ in the appropriate

SA- Strongly Agree, A- Agree, N-Neutral, D-Disagree, SD- Strongly Disagree

	SA	A	N	D	SD
The basic values and principles support					
knowledge sharing					
It is an open, encouraging and supportive					
culture					
Knowledge sharing is a teamwork and all					
must contribute					
The staff believe that knowledge sharing is					
good for newcomers only					

10. Please indicate the extent to which you agree or disagree with the following factors which hindering knowledge sharing practices by putting a tick ($\sqrt{}$) where appropriate

Where SA- Strongly Agree, A- Agree, N –Neutral, D –Disagree, SD- Strongly Disagree

	SA	A	N	D	SD
Leadership					
Trust					
Organization Culture					
Organization Structure					
Communication					
Co-ordination					
Facilitation					
Social interaction ties					
Identification					

11. Do yo of your L	ou believe that knowledge sharing paid.ibrary?	oractice is a valuable to	ool in daily operations
12. How	will you handle this factors in order	to promote service de	livery?
13. a). Do	oes the library have a policy in place	e to guide in knowledg	e sharing?
b). How	does it state?		
•••••			
14. Whice	ch of the following strategies would ary?.	l you propose enhance	knowledge sharing in
S/No.	Strategy	Yes	No
1	Story telling		
3	Performance Evaluation and Appraisal Strategy		
3	Knowledge repositories		
Any othe	r please specify		
•••••			
• • • • • • • • • • •	•••••		

Appendix IV: Interview guide for University librarian and deputy University librarians

- 1). What kind of support does the Library Management render to encourage knowledge sharing among staff?
- 2). What strategies are put in place by the library to facilitate knowledge sharing?
- 3). What is the attitude of library staff towards knowledge sharing?
- 4). What Information technology infrastructure is in place to promote knowledge sharing among library staff?
- 5). In what ways has knowledge sharing affected service delivery in the library?
- 6). What factors are hindering staff from sharing knowledge with other library staff?
- 7). What challenges do you encounter when sharing knowledge in the library?
- 8). How does your library ensure it retains and shares knowledge of staff leaving the library for greener pastures or through retirement?
- 9). What policies are in place governing knowledge sharing?
- 10). How would you describe organization culture for knowledge sharing in your library?
- 11). What strategies would you propose that will enhance knowledge sharing in your library?

Appendix V: Kisii University Introductory Letter to NACOSTI



KISII UNIVERSITY

Telephone: +254 20 2352059 Facsimile: +254 020 249 1131 Email: researcha kisimmiversity ac ke P O BOX 408 – 40200 KISH www.kishuniversity.ar.kr

OFFICE OF THE REGISTRAR RESEARCH AND EXTENSION

REF: KSU/R&E/ 03/5/ 530

DATES: 06th May, 2021

The Head, Research Coordination
National Council for Science, Technology and Innovation (NACOSTI)
Utalii House, St. Floor, Uhuru Highway
P. O. Box 30623-00100
NAIROBI - KENYA.

Dear Sir/Madam

RE: JOSEPH LAMECH ONDIEKI MIN 12/20358/14

The above mentioned is a student of Kisii University currently pursuing a Degree of Master of Information Science. The topic of his research is, "Knowledge sharing practices among Library Information Science professionals in improving service delivery in Public Universities in Kiambu County, Kenya".

We are kindly requesting for assistance in acquiring a research permit to enable him carry out the research VERSIT

0 8 MAY 5051

Thank you.

Prof. Anakalo Shitandi.

Registrar, Research and Extension

Ce: DVC (ASA) Registrar (ASA) Director SPGS

Appendix VI: NACOSTI Research License



Appendix XI: Plagiarism Report

KNOWLEDGE SHARING PRACTICES AMONG LIBRARY STAFF IN IMPROVING SERVICE DELIVERY IN PUBLIC UNIVERSITIES IN KIAMBU COUNTY, KENYA

ORIGINA	LITY REPORT			
-	7% RITY INDEX	16% INTERNET SOURCES	5% PUBLICATIONS	7% STUDENT PAPERS
PRIMARY	SOURCES			
1	ajoeijou Internet Sour	rnals.org		4%
2	researc Internet Sour	hspace.ukzn.ac.z	za	1%
3	kisiiuniv Internet Sour	ersity.ac.ke		1%
4	ir-library Internet Sour	y.ku.ac.ke		1%
5	etd.aau Internet Sour			1%
6	mafiado Internet Sour			1%
7	hdl.han			1%
8	Submitt Student Pape	ed to Kenyatta l	Jniversity	<1%