

**TRANSFER OF TACIT KNOWLEDGE AMONG STAFF AT THE KENYA
NATIONAL LIBRARY SERVICE, NAIROBI**

BY

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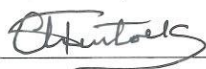
**A Thesis Submitted to the School of Information Sciences in Partial Fulfillment of
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Information Studies in the Department of Library, Records Management and
Information Studies**

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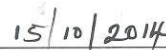
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DEDICATION

I wish to dedicate this research thesis to my family and all persons that have inspired me directly and indirectly to the accomplishment of this study.

ABSTRACT

Over the years in employment, staff acquire tremendous amount of tacit knowledge. This intellectual capital acts as a key driver of creativity, innovation and competitive advantage. Management of this knowledge facilitates decision making capabilities, builds learning organizations and stimulates change. There are current changes in the library's work force characterized by search for greener pastures, retrenchments, dismissals, aging labour force and death. When employees depart, they take their valuable knowledge, skills and expertise. This results in reduced library efficiency, costly mistakes and unexpected quality problems. When libraries downsize or reorganize, priceless tacit knowledge is lost. Lack of cooperation and collaboration; under-utilization of knowledge, skills and abilities; and lack of knowledge management strategies and policies are factors that prevent creation of new strategies, new services and deter transfer of tacit knowledge in libraries. Today, transfer of tacit knowledge is perceived as the key to retaining competitive advantage hence the need to understand, harness and retain its supremacy. The aim of this study was to investigate transfer of tacit knowledge among library staff at KNLS, establish challenges and propose a framework to enhance the transfer of tacit knowledge. The specific objectives were; to explore knowledge management practices at KNLS; to find out kinds of tacit knowledge among library staff at KNLS; to explore communication channels used in transfer of tacit knowledge; to identify challenges and experiences in transferring tacit knowledge and propose a framework to enhance transfer of tacit knowledge at KNLS. The study was informed by the Theory of Communities of Practice. The study adopted a qualitative approach. The population was stratified into departments and purposive sampling was employed to select various departments and respondents. Key informants in the study were senior members of management. Data was collected through face to face interviews. Data collected has been presented and analysed using qualitative techniques and where necessary, tables, graphs and charts have been used. The key findings of this study were; KNLS library staff had wealth of accumulated tacit knowledge and expertise in the field of librarianship; Knowledge management had not been fully embraced; there was no knowledge management policy; Library staff had both individual and collective tacit knowledge; Channels used in transfer of tacit knowledge were semi-formal; Major challenges that hindered transfer of tacit knowledge were; lack of motivation, lack of knowledge management strategies and policies to guide knowledge management activities and knowledge hoarding. The study recommends that KNLS should formulate a knowledge management policy, carry out a knowledge audit, provide a knowledge sharing culture, motivate staff and transfer of tacit knowledge will take place simultaneously. The study has proposed a model that can be adopted to enhance transfer of tacit knowledge.

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LIST OF ABBREVIATIONS

CDBD: Collection Development and Book Distribution

CCTV: Closed-Circuit Television

COP: Communities of Practice

DDC: Dewey Decimal Classification

HOD: Head of Department

HR: Human Resource

INASP: International Network for Availability of Scientific Publications

KA: Knowledge Audit

KMP: Knowledge management policy

KNLS: Kenya National Library Service

NAL: Nairobi Area Library

NLD: National Library Department

NCST: National Council for Science and Technology

SECI: Socialization, Externalization, Combination and Internalization

TK: Tacit Knowledge

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CHAPTER ONE INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

In today's world, knowledge is the driver of social, economic and political development. It is a key resource. It is the main source of creativity, innovation and competitiveness. Management of knowledge in organizations today is regarded as a fundamental activity of obtaining, growing and sustaining intellectual capital. Grant (1996) stated that knowledge management is strategically important for organizations to gain a competitive advantage over their competitors and to add value to their products. Drucker (1993) pointed out that knowledge would replace land; labour, capital and machines. Drucker's foresight was unsuccessful. But today, organizations are busy trying to capitalize on their organizational intellect to maintain competitive advantage through knowledge management practices.

Hansen et...al (1999) remark that for hundreds of years, owners of family businesses have passed on their commercial wisdom to children, master craftsmen have painstakingly taught their trades to apprentices, and workers have exchanged ideas and know how on the job. Armstrong (2006) points out that the foundation of industrialized economies have shifted from natural resources to intellectual asset, he further stated that executives have been compelled to examine the knowledge underlying their business and how that knowledge is used.

Knowledge management today is concerned with storing and sharing wisdom, understanding the expertise accumulated in an organization about its processes, techniques and operations. Ulrich (1998) noted that knowledge has become a direct competitive advantage for companies selling ideas and relationships. Goldman (1991) defines knowledge as “*justified true belief*”, Bennet and Bennet (2000) emphasizes that knowledge while made up of data and information, can be thought as of much great understanding of a situation, relationships, casual phenomena and the theories and rules that underline a given domain or problem.

Knowledge is usually classified as either explicit or tacit (Polanyi, 1966). According to Armstrong (2006) explicit knowledge is that which can be articulated, standardized, shared independently of its human source, or stored in systems or processes. Examples of types of explicit knowledge are manuals, documents and procedures. He defines tacit knowledge as what we know, but has not been articulated or cannot always be articulated and that people are not even aware that they have this knowledge. According to Shariq (1999) tacit knowledge is fragile and subjected to decay or loss if not passed on. Collison and Parcell (2001) noted that tacit knowledge transfer process is a human to human process and that the process is inherently interactive and dynamic.

Knowledge management deals with how people acquire, exchange and disseminate knowledge. According to the Resource-Based-View (RBV) theory of the firm, knowledge is considered as one of the most important resources in an organization’s success and competitiveness (Grant, 1996). Many organizations in this knowledge-based

economy search for ways on how tacit knowledge that exists within individual employees can be transferred within the organization. Knowledge management therefore is any process or practice of creating, acquiring, capturing, sharing and using knowledge, wherever it resides, to enhance learning and performance in an organization (Scarborough et...al, 1999).

Knowledge management is concerned with exploitation and development of knowledge assets with a view to furthering organizational objectives (Rowley, 1990). Knowledge is an intellectual asset and knowledge management is a tool which utilizes intellectual asset to broaden the organization's objectives. Grey (1996) defines knowledge management as '*an audit*' of '*intellectual assets*' that highlight unique sources of critical functions and potential bottle necks which hinder knowledge flows to the point of use. He further opined that knowledge management protects intellectual assets from decay, seeks opportunities to enhance decisions, services and products through adding intelligence, increasing value and providing flexibility.

Tacit knowledge consists of the '*know-how*' and the '*know-that*' (Polanyi, 1966). He further provided the distinction between 'know-how' and 'know-that'. He pointed out that '*Know-how*' is the ability of a person to perform tasks and '*know-that*' is holding pieces of knowledge in one's mind. Knowledge transfer is the process of conveying or moving knowledge from one person to another. Communication between employees generally contributes to transfer of knowledge. Therefore organizations should create a conducive environment that encourages communication. Sharing knowledge on a daily basis in the

work place plays an important role in increasing an employee's exposure to different ideas. Tacit knowledge transfer at both individual and organizational level is an important factor that fosters creativity and innovation of processes, products and services.

Kenya vision 2030 (2007, p.25) states that knowledge building and management would be a fundamental aspect of growth and competitiveness in the Kenyan economy. It further states that the public service would design measures to allow better sharing and dissemination of knowledge. To attain this vision in the current knowledge-based economy, both public and private organizations should embrace knowledge management, formulate and implement knowledge management strategies and policies.

1.2 Knowledge management practices in libraries

In the 19th century, libraries were known as the only information suppliers. In the 20th century, libraries have undergone various enormous changes dictated by developments in Information Technologies, social and economic changes. There has been enormous growth of private libraries, cyber cafes, information consultancy and brokerage firms. High level of user expectations in public libraries has resulted into upgrading and innovation of library resources and services. All these changes have resulted in competition for qualified, competent and skilled man-power to deal with the current and future demands in information processing and knowledge dissemination.

Libraries and information centers in this knowledge-based economy should incorporate knowledge management in their operations to improve services. Knowledge management

has been functional in commercial organizations with the aim of improving operations to gain competitive advantage and increase profits. Teng and Hawamdeh (2002) suggested that knowledge management can also be applied in non-profit making organizations to improve communication among staff and between top management. Mchombu (2007) states that knowledge management in libraries improves work efficiency, productivity and improve its ability to manage change. He further states that knowledge management practices attracts, retains and motivates committed talent thus maximizing the library's use of available collective wisdom, experience and brain-power of human capital assets.

Knowledge management promotes relationship in and between libraries, between library and user (Cao, 1999). He continued to state that knowledge management strengthens knowledge internetworking and quickens knowledge flow. Maponya (2004) stated that the basic goal of knowledge management within libraries is to leverage the available knowledge that may help librarians to carry out their tasks more efficiently and effectively. Kim (1999) pointed out that *“knowledge management practices aim to draw out the tacit knowledge people have, what they carry around with them, what they observe and learn from experience, rather than what is usually explicitly stated”*.

In this knowledge-based economy, efficient and effective management of knowledge in public libraries is a core competence for survival. The growth of private libraries, cyber cafes, and private information and knowledge dissemination centers calls for public libraries to embrace and implement knowledge management. Knowledge management will assist librarians to share and put information into action in ways that strive to

improve library performance. Knowledge management practices are defined as follows; knowledge creation, knowledge capturing, knowledge acquisition, knowledge sharing and transfer.

1.2.1 Knowledge creation

Knowledge has a life cycle. It starts with its creation in a friendly and non-hostile environment. Once created, knowledge is an entity that continuously moves, develops and changes while transmitting from one individual to another (Smith & Paquette, 2010). Knowledge creation is typically the outcome of an interactive process that will involve a number of individuals who are brought together in a project team or some other collaborative arrangement (Newell et al., 2002). Knowledge creation takes place during brainstorming sessions, workshops and seminars or in any interactive sessions.

The main objective of any library is to efficiently disseminate quality information services to its users. The library requires information and knowledge of the library users and their information needs, library collection, library facilities and technologies available. While gathering all these information, the librarians create knowledge to enable them to be conversant with the library collection as well as the users' needs. Through interaction with the library users, new knowledge is created. Knowledge is also created through interactions between library staff, management and consultants.

1.2.2 Knowledge capturing

Once knowledge is created, it then needs to be captured so that it is utilized. Capturing knowledge is crucial to the success of any library. Probst et...al (2000) states that *“organizations suffer permanent loss of valuable experts through dismissals, redundancies, retirement and death”*. He further pointed out that knowledge stored in the heads of these individuals is lost if not captured. Maponya (2004) insists that *“libraries need to develop ways of capturing its internal knowledge, devise systems to identify people’s expertise and develop ways of sharing it”*.

Knowledge capturing is the process of documenting knowledge and stored in databases for current and future use. Capturing of tacit knowledge can be carried out through sharing and transferring best practices and expertise from one generation to the other or from one person to the other. Seminars, workshops and brainstorming sessions between employees, experts and consultants provide excellent venues for creating and capturing tacit knowledge. Tacit knowledge can be captured in explicit form to aid access to wider audience and stored for future use.

1.2.3 Knowledge acquisition

Knowledge acquisition is about absorbing and storing facts about an event or occasion. It is the process of removing the rules of experts and placing them into knowledge bases that can help an individual or organization to improve in performance. Acquisition in general refers to an organization's capacity to identify, acquire and accumulate knowledge that is essential to its operations.

Libraries can acquire knowledge from external sources to improve on its performance and service delivery. According to Shanhong (2000) knowledge can be acquired through establishing knowledge links or networking with other libraries; attending training programmes, conferences, seminars and workshops. Acquiring knowledge of the library user enables the librarian to know the user better, understand his/her requirements and expectations which enables the librarian to serve the user better.

1.2.4 Knowledge sharing and transfer

Knowledge sharing and transfer is the core component and distinguished feature of knowledge management and is the key condition for innovation activities (Semertzaki, 2011). She further pointed out that “*through sharing knowledge; organizations enhance its performance while new knowledge is created in a continuous and cumulative process*”. Robertson et...al (2002) points out that many organizations often waste their resources and lose a significant amount of money through repeated mistakes such as duplication of projects. He further pointed out that this happens because employees are unaware of each other’s knowledge due to lack of knowledge sharing and transfer throughout the organization.

Knowledge sharing is about transferring the dispersed know-how. Branin (2003) states that “*expertise exists in people and much of this knowledge is tacit rather than explicit, which makes it difficult to share*”. Jantz (2001) pointed out that there is no systematic approach to organizing the tacit knowledge and making it available to other librarians and staff in order to improve the operation of a library. Knowledge management as stated

earlier is to ensure knowledge is shared and distributed within the organization or library. Libraries should therefore provide an enabling environment for the librarians to share and transfer tacit knowledge.

Semertzaki (2011) points out that knowledge sharing fosters collaborations and generation of new ideas in organizations. Today, libraries operate in a constantly changing environment hence the need to engage in knowledge management practices to achieve library goals. Librarians therefore should constantly update their skills and competencies to keep pace with the dynamic changes. Mchombu (2007) stated that the older concept of information literacy and information retrieval need to be revisited to include knowledge management literacy so as to keep up with knowledge development.

The World Bank Report, (1998/99) states that new developments call for the use of knowledge as a strategic resource and behaviour change among people. It continues to point out that hoarding of information and knowledge should be replaced by sharing and communication of both tacit and explicit information and knowledge. The report summarizes that sharing of knowledge would empower organization and communities to meet development challenges. Semertzaki (2011) points out that knowledge sharing and transfer are facilitated by communication, interactivity and reusability. She further emphasized that knowledge transfer results in knowledge sharing as knowledge transfer is a part of everyday life inside an organization.

1.3 Background information

1.3.1 Kenya National Library Service

The Kenya National Library Service (KNLS) is a state corporation established by an Act of Parliament in 1965, Cap 225 of the Laws of Kenya. The objective of the KNLS is to develop and promote a reading culture through the provision of library and information services countrywide.

KNLS quality statement states that “*KNLS is committed to provide timely, relevant and accessible information services that consistently meet the needs of its customers*”. In the quality statement, KNLS states that it shall at all times provide the necessary resources for effective implementation and continual improvement of the quality management system that conforms to the ISO 9001 standard; it shall ensure that it provides products and services that meet its customers’ needs and attempts to exceed their expectations; it shall strive to be competitive, innovative and commit to always protect and uphold its customers’ interests without compromising the set quality standards.

The Kenya National Library Service vision statement reads: “*A national center of excellence that preserves and disseminates information for knowledge and creativity*” while its mission statement says “*To make information resources available and preserve the national imprint for use by all communities through utilization of appropriate technology*”. The Kenya National Library Service is mandated by the Act to: promote, establish, equip, manage, maintain and develop libraries in Kenya. In its core values,

KNLS upholds quality, transparency, relevance, accountability, teamwork and professionalism.

Currently, KNLS has 58 branches countrywide and the library clientele cover the entire public including: individuals, students, children, youth, researchers, government agencies, private institutions, pensioners, prisons, hospices and hospitals, schools, orphanages and persons with disabilities, among others.

1.3.2 National Library Services

The National Library is a department at Kenya National Library Service, situated at Upper Hill off Ngong road. This department has a number of functions namely; acts as a bibliographic centre; offers reference services; preservation of the national imprint through the collection and safe custody of legal deposits on Kenyan publications; acts as a depository centre for all publications that are published in or with an interest to Kenya. The Books and Newspapers Act, Cap 111 of the Laws of Kenya (Miscellaneous amendments no. 22) of 1987, states that "*every publisher in Kenya is required to deposit two copies of each title published, with the KNLS Director within 14 days of publishing the title at the publisher's cost*". These legal deposits (together with books published outside Kenya, but with an element of Kenya and those published by Kenyan writers outside Kenya) form the National Collection, "*Kenyana*".

The National Library provides; reference and referral services; online databases to researchers; facilitates international inter-library lending and stocks government

publications. These are constitution review materials, laws of Kenya, Kenya Gazettes and bound periodicals e.g. copies of past newspapers, magazines and journals for use by the public. It also acts as a depository library for World Bank, United Nations, International Labour Organization, and International Monetary Fund among others.

1.3.3 Nairobi Area Public Library services (NAL)

NAL is a department of Kenya National Library Services, situated at Upper Hill off Ngong road that provides various library services to the public. It is open from Monday to Friday between 8.00am and 6.30 pm, Saturday from 8.00am to 5.00pm and closed on Sundays and public holidays. The library performs a number of functions including; providing an ample reading facilities for the public (both adults and juniors); Lending of books and other publications to registered members of public; Bulk lending of books to learning institutions (this is limited to availability of stock); provides an online catalogue; technical assistance on library development to interested government and private institutions; provides Internet and bureau services (photocopy & internet access); Inter-library lending; HIV/AIDS information to encourage behavioural change.

The public library also offers field practicum opportunities to those studying library and information studies. The Adult Section comprises of the main counter which handles customer care and regular lending. Short loan counter is for publications that are in high demand and limited availability. Reference section is for short term lending (typically 4 hours) of materials that are in high demand and must be used within the library premises. These include dictionaries, magazines and Atlases among others. Multimedia section is a

theatre that provides videos on various fields. Some of the videos are educative, feature HIV information or for entertainment. There is also a section for juveniles below the age of fifteen.

Braille section for the visually impaired has equipment such as Braille's that are used to transcribe text. The section also has Navigators which are specialized equipment which enable users to listen to recorded audio books. They also have CCTV and Videomax used to enlarge materials. The Braille section offers transcription services (from regular text to Braille) to the public. Often the Braille section offers Outreach services in which the section staff visits institutions for the blind to share material. Such institutions include the Machakos and Thika schools for the blind. The public library has a mobile library that takes services to the outskirts of Nairobi such as Rongai, Ngong, Ruai, Machakos and Kikuyu. The route is changed every year to serve new locations.

1.3.3.1 Outreach Services

The KNLS also provides outreach services country wide such as: Camel library service in Garissa and Wajir Libraries; Donkey library service in Nyilima Library, Bondo District; Book box service to schools; Cupboard library service in Laikipia; Travelling libraries / mobile library vans in some KNLS provincial and district libraries. Nairobi Area public library provides Braille services to institutions dealing with visually impaired persons. Through their mobile library services they offer services to prisons, communities around Nairobi Area and Hospitals. Most of their services are provided for the benefit of the general community, and are extensively funded by the government in public interest.

However, some, including Internet and consultancy, bear affordable charges to cover the costs of their maintenance, preparation and delivery.

1.3.4 Collection Development and Book Distribution Department (CDBD)

The CDBD department is located at the basement of the National and Nairobi Area libraries at KNLS Upper Hill. This department has unique functions. It is charged with selection, acquisition, processing and distribution of information resources for KNLS library networks country wide. The department is mandated to meet the needs of its users in education, information, leisure, personal and community development.

The CDBD department has its own vision and mission. Its vision reads “*A gateway of rich information resources that transforms lives*” and the mission reads “*To select, process and distribute quality information materials that meets and exceeds customer requirements*”. The CDBD department has a collection development policy that guides in collection development, management and distribution of all information materials to the branches.

The CDBD department is guided by the following objectives:

- a) To update book stock of KNLS network
- b) To bind and repair information materials
- c) To promote literacy and sustain reading promotion campaigns.

The department processes all KNLS information materials. Information materials are accessioned, classified using DDC scheme and catalogued. This department has sections for acquisition, cataloguing and distribution of information resources. It further has a section for binding and repair of library information materials.

1.3.5 Buruburu public library

Buruburu public library is the youngest branch of the many KNLS branch libraries. This library was opened to the public on 21st February 2011. Buruburu public library is located in Buruburu (East of Nairobi Central Business District). It is a state of art facility that was built to meet the current demands in information access, use and dissemination by all clientele. The library has five sections namely; Adults, Teenagers, Children, Multimedia and cyber café.

The library is ISO: 9001-2008 certified and its policies are documented in their user manual which is accessed both by the public and staff for better service provision. The library has information resources in all formats and accepts donations that meet the quality and relevance of their clientele. The library is a four storey building constructed in 0.6 Ha plot and currently houses the KNLS administrative offices.

1.3.6 Knowledge management at Kenya National Library Service

Kenya National Library Service plays an important role in planning and developing of the library infrastructure throughout the country. Through its objective of fostering a reading culture, it inculcates a culture of knowledge and creativity in the development of the country. KNLS provides information for development through its National and Public

library networks that enable people to fight poverty deprivation and illiteracy. KNLS has gone beyond formal education and has become the heart of personal growth and community development. KNLS serves all clienteles and promotes reading for information, enjoyment and knowledge.

Knowledge management is a new discipline that has not been fully embraced in libraries and information centers. Implementation of knowledge management results in better quality services, better employee performance and satisfaction which amount to teamwork. Jain (2011) states clearly that knowledge brings forth organizational benefits such as improved productivity, performance, continuous innovation and effective decision making. Knowledge management improves communication among staff and between top management and promotes a culture of sharing (Teng and Al-Hawamdeh, 2002).

KNLS has authority relationship structures that have been developed to enhance its management and leadership. Communication in the organization flows down, up and horizontally which provide room for sharing ideas, experiences and expertise. Knowledge management in the organization has not been fully embraced. KNLS uses its intranet as a knowledge sharing and management tool, but still lack awareness, policies, strategies and effective communication channels to ensure proper implementation of knowledge management practices.

Clarke (2004 in Nazim and Mukherjee 2012) stated that poor management of knowledge could lead to information overload and confusion as well as wasted man-power. Jennex (2007) stated that organizations that have embraced knowledge management have benefitted through enhanced collaboration, improved communication, improved employee skills, better decision making and improved innovation.

1.4 Statement of the problem

Over the years in employment library staff acquire quite tremendous amount of tacit knowledge. They act as organizational repositories. Tacit knowledge gives them the ability to know how things work, how to get things done and whom to go to when problems arise. Losing their experience and expertise can significantly reduce library efficiency. This may result in costly mistakes, unexpected quality problems or disruptions in service delivery and performance. The Kenya National Library Services has successfully operated in a competitive environment characterized by growth of academic libraries, private libraries, resource centers, information bureaus and dynamic changes in technologies.

There are current drastic changes in the library's workforce characterized by search for greener pastures, dismissals, retrenchments, aging labour force and death. Employees who leave take their valuable knowledge, skills and experiences with them. This prescribes a challenge to the library's ability to provide quality information services and attain high level of performance. When libraries downsize, reorganize and organizational culture changes, priceless tacit knowledge is lost. Library staff may be assigned new jobs

and are unable to use their wealth of accumulated tacit knowledge. Lee in Smith (2001) stated that *“90% of the knowledge in an organization is embedded and synthesized in people's heads”*.

Kenya National Library Service should be aware of factors contributing to or preventing creation of new strategies, new services and innovative ways of disseminating information. Lack of cooperation and collaboration; Under-utilization of knowledge, skills and abilities; Lack of knowledge management policies and supportive systems are causes that lead to poor service delivery and deter transfer of tacit knowledge. If KNLS seeks to be successful, then it should create an environment enabling its employees to verbalize their tacit knowledge, which in turn may lead to a pool of ideas that provide a competitive advantage for the libraries.

According to (Nonaka and Takeuch, 1995) tacit knowledge is learned through collaborative experience and is difficult to articulate, formalize and communicate. Individual tacit knowledge can be found in an employee's schemes, skills, habits and abstract knowledge (Polanyi, 1966). When an employee goes for greener pastures or retires from service, he or she retires or exits with quite a lot of knowledge, thus the employee's exit is felt by the library or organization.

Building on the works of the Shannon and weaver, Davenport and Prusak (1998) considered that knowledge transfer involves two actions, Transmission and absorption by a group of people. Therefore if knowledge has not been absorbed then it has not been

transferred. Tacit knowledge transfer requires willingness of a group or an individual to work with each other through sharing which is possible for knowledge to be transferred to another person. Transfer of tacit knowledge is often impossible in the absence of the individual employees who possess it, and of the organizational routine and systems. Transfer of tacit knowledge in libraries depends on the atmosphere of trust and collaboration. It also depends on ease of communication and the relationship between the source and the receiver. Tacit knowledge transfer involves two actions, which are transmission that is the process of sending knowledge to a potential recipient and the absorption by that person or group.

There is relatively little literature that deals with tacit knowledge transfer and near to none when it comes to transfer of tacit knowledge in libraries in Kenya. The study has tried to fill this gap by finding out transfer of tacit knowledge at the KNLS, Nairobi. This study investigated the transfer of tacit knowledge among library staff of KNLS with a view of identifying the challenges and proposing a framework to enhance transfer of tacit knowledge.

1.5 Aim of the study

To investigate transfer of tacit knowledge among library staff at Kenya National Library Service and propose a framework to enhance transfer of this knowledge.

1.5.1 Objectives of the study

The study was guided by the following objectives:

1. To explore knowledge management practices at the Kenya National Library Service.
2. To find out kinds of tacit knowledge among staff at the Kenya National Library Service.
3. To explore communication channels used in the transfer of tacit knowledge by staff at Kenya National Library Service.
4. To identify the challenges experienced in transfer of tacit knowledge at Kenya National Library Service
5. To make recommendations and propose a framework to enhance transfer of tacit knowledge at the Kenya National Library Service

1.5.2 Research questions

To achieve the objectives of the study; the following research questions guided the study:

1. What knowledge management practices are in use at Kenya National Library Service?
2. What policies govern knowledge management practices at Kenya National Library Services?
3. What kinds of tacit knowledge are found among staff of the Kenya National Library Service?
4. What communication channels are used in transfer of tacit knowledge at Kenya National Library Service?
5. What challenges are faced by library employees when transferring tacit knowledge at Kenya National Library Service?
6. How can transfer of tacit knowledge be enhanced at Kenya National Library Service?

1.6 Assumption of the study

The study was based on the following assumption:

- Knowledge management has not been fully embraced and understood in libraries and therefore affects transfer of tacit knowledge among employees.

1.7 Significance of the study

Today, knowledge is vital for the survival of any organization or information center. In the current knowledge-based economy, gaining a small advantage over competitors carries an organization a long way. Private libraries, cyber cafes, resource centers and information bureaus are on the lookout for possibilities of exploring the optimum exploitation of intangible assets to attain competitive advantage. This study will assist the Kenya National Library Service to leverage available resources and utilize its intellectual capital to enhance creativity as well as innovate existing services to attain a competitive advantage.

Knowledge management practices provide effective management of intellectual capital which leads to effective dissemination of library services and user satisfaction. This study is significant to KNLS, organizations and information centers for it provides ways on how to identify, share and transfer tacit knowledge that exists within KNLS libraries and utilize it to enhance learning and performance. This study will benefit KNLS and other institutions on ways of retaining and motivating staff in order to get an excellent output from them.

This study will enable libraries and various organizations to identify and tackle challenges that hinder transfer of tacit knowledge. This study acts as a guide to KNLS and various information centers in formulation and implementation of strategies and policies to enhance smooth transfer of know-how, expertise and experiences. This will pave way to tapping of invisible reservoirs of experiences for creativity and innovation of library services.

This study to the best of the researcher's knowledge forms a pioneering work in the study of transfer of tacit knowledge in libraries in Kenya. Information that has been generated in this study is unique in that no other study has been conducted in Kenya and specifically at the Kenya National Library Service. The study has come up with a framework that will guide libraries in enhancing transfer of tacit knowledge among library staff. This study is of significance to KNLS staff and other libraries in transfer of expertise, know-how and experiences. This study forms a basis for further research.

1.8 Scope and limitation

1.8.1 Scope

Although there are many libraries in Kenya, the study focused on KNLS Nairobi County (KNLS Upper Hill and Buruburu libraries). Kenya National Library Service Upper Hill houses both the National library, CDBD as well as the Public library. Buruburu public library is located in BuruBuru East of NCBD (Nairobi Central Business District) and houses both the public library and the KNLS Administrative offices. The study samples were; The Management (Senior Management of the Institution and Head of Departments)

and library staff in both the National and Public libraries. The study targeted all KNLS library staff in various departments, sections and units in the institution.

1.8.2 Limitation

Limitation of the study was the general lack of empirical studies on transfer of tacit knowledge in Kenya and specifically at KNLS.

1.9 Summary

The chapter has presented; background of the study, statement of the problem, aim and objectives, research questions, assumptions, significance, scope and limitations of the study. It is evident that knowledge is power but the researcher emphasizes that knowledge is power if shared. Knowledge acts as a catalyst for change and is crucial for economic, social and political development of a nation.

1.10 Definition of Terms

Acculturation: is the exchange of cultural features that results when groups of individuals having different cultures come into continuous first hand contact; it is also the processes that occur when different individuals or groups of people meet and exchange aspects of their culture.

Barriers: are objects, ideas, practices, structures, systems, etc. that prevent or discourage action. Barriers are not good when they discourage sharing or transfer of knowledge.

Best practices: The application of theory to real life situations procedures that, when properly applied, consistently yield superior results and are therefore used as reference

points in evaluating the effectiveness of alternative methods of accomplishing the same task.

Braille: is a series of raised dots that can be read with the fingers by people who are blind or whose eyesight is not sufficient for reading printed material.

Channel: is a means by which a message gets from the source to the receiver

Communication: is a process in which participants create and share information or knowledge with one another in order to reach a mutual understanding

Communities of practice: are groups of people who share a concern, a set of problems or passion about a topic and who deepen their knowledge and expertise in the area by interacting on an on-going basis

Culture: is a combination of organizational history, shared experiences, group expectations, unwritten or tacit rules; ethics, and social interactions that affect the behaviour of everyone in a given context.

Explicit knowledge: is the formal recorded or systematic knowledge in the form of scientific formula, procedures, rules, organizational archives, principles, etc., and can be easily accessed, transmitted, or stored in computer files or hard copy.

Harness: to control and make use

Hoarding: suggests a premeditated attempt to hide something away for one's own future purposes.

Innovation: is an idea, practice or project that is perceived as new by an individual or other unit of adoption.

Internship: A limited time of training intended to facilitate the application of theory to practice following a completion of course work.

Intranet: An in-house website design to be used only by the staff or employees of an organization.

Know-how: is the technical expression of knowledge e.g. the manual and mental skills of a crafts man or cataloguer or binder.

Knowledge assets: are the human structural and recorded resources available to the organization. Assets which reside within the minds of staff, members, customers and colleagues and also include physical structures and recorded media

Knowledge flow: is the way knowledge travels, grows and is stored. Knowledge flow up and down from management within circles of sharing through planning, investigation and training; and through common sources such as books, databases or knowledge bases.

Knowledge management: is the explicit organization and control of both tangible and intangible knowledge within an organization

Model: An accurate three dimensional representation of the physical appearance of the real object.

Narratives: a description of a series of events

Outsource: contacting of services from an outside vendor or company.

Policy: a plan for action

Recipient: is the receiver or destination of the message

Reference interview: A communication that occurs between a reference librarian and a library user that determines the user's specific information needs.

Share: To communicate; to allow someone to use something or some resources with you instead of hoarding them all for yourself.

Source: is an individual that originates a message

Tacit knowledge: is the personal knowledge that resides within the mind, behaviour and perceptions of individual members of the organizations.

Transfer: to move, carry, convey or transport from one person or place to another; transmission of information or data from one destination to another.

Wisdom: A form of well-considered and proven knowledge which is valuable to conserve and apply particularly to make effective decision in uncertain circumstances.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature relevant to this study. It evaluates literature of previous studies, observations and opinions related to the area of study. Its goal is to appreciate and understand well researched work already made and contributions made by others related to the area of study. This chapter also presents theoretical framework upon which the study is based. The study is informed by Wenger et...al (2002) theory of Communities of Practice. The chapter reviews relevant literature and empirical studies on transfer of tacit knowledge. The literature review themes are derived from the objectives.

2.2 Purpose of literature review

Literature review provides knowledge and understanding of the existing conceptual and analytical framework in other research from literature sources. The information and knowledge based on the existing literature sharpens the focus of the topic and leads to the formulation of appropriate and relevant research questions, objectives or hypothesis. It helps to set the focus and direction of the research by leading the researcher to the right choice of the research design and methods of data collection and analysis (Chandra, 2004).

Mugenda and Mugenda (1999) argue that the purpose of literature review is to help the researcher gain considerable insight into earlier studies related to the current study in order to avoid unnecessary duplication and to understand the theories informing the

study. They further state that it enables the researcher to compare and recognize contributions and/or shortcomings of various scholars who have done similar or related studies before.

2.3 Theoretical framework

A theory is a set of explanatory concepts (Silverman, 1993). A theory is a system for explaining phenomena which states constructs and laws that interrelate the constructs to one another (Mugenda and Mugenda, 1999). Cozby (2001) argues that theories have four purposes in scientific research, namely: description, explanation, prediction and control. He further notes that theories generate new knowledge and new hypotheses about behaviour, which could be confirmed or contested through research and could reveal weaknesses in a theory and force researchers to modify or develop a new and more comprehensive theory.

2.3.1 Knowledge transfer and exchange model or knowledge spiral model (Nonaka and Takeuchi, 1995)

The knowledge spiral model was proposed by Nonaka and Takeuchi (1995) who attribute the success of Japanese companies to their effectiveness in creating knowledge. The core assumption of this model is that tacit knowledge has to be mobilized and converted. The model does not only explain knowledge creation, but also describes knowledge transfer. Nonaka and Takeuchi (1995) identified four specific conversion processes: Socialization, externalization, combination and internalization.

Socialization stage deals with transfer of tacit knowledge between individuals through observation, interaction and practice. In the *Externalization* stage, it is triggered by dialogue or collective reflection and relies on analogy or metaphor to translate tacit knowledge into documents and procedures. *Combination* stage consequently reconfigures bodies of explicit knowledge through sorting, adding, combining and categorizing processes and spreads it throughout the organization. *Internalization* stage translates explicit knowledge into individual tacit knowledge.

This model is based on the interactions between tacit and explicit knowledge. It explains that tacit knowledge can be transformed into explicit knowledge and vice versa. Tacit knowledge cannot be easily codified; once it is codified it loses its tacitness. Some knowledge might be lost in the process of codifying the knowledge. Tacit knowledge is hard to articulate but can be transferred easily through interactions. Although this model has been used by various researchers in knowledge transfer studies, the model with its four stages of transforming tacit knowledge into explicit knowledge and vice versa could not meet the objectives of this study.

2.3.2 The knowledge transfer theory (Szulanski, 1996)

Szulanski (1996) represented knowledge transfer as a sequential process which encompasses four steps between the sender and the receiver: Initiation, implementation, ramp-up and integration.

Gabriel Szulanski came up with the knowledge transfer model while focusing on the process of internal knowledge transfer within an organization. **Initiation** is the phase where the need for a particular type of knowledge is created and the required knowledge may exist within an organization. **Implementation** phase is the actual process of transferring knowledge and the relevant knowledge sources [documents, emails etc.]. **Ramp Up** is the phase the knowledge recipient starts using the knowledge in practice. Here the recipient identifies and resolves issues by applying the received knowledge in the relevant context. **Integration** phase is where the application of the knowledge proves to be successful and the recipient starts reusing this to perform a task more efficiently.

This model is still current in knowledge transfer and deals with transfer of knowledge as a linear process from the source to the receiver. Due to the absence of feedback, the model was not appropriate to this study.

2.3.3 Communities of Practice (Wenger et...al 2002)

The theory of Communities of Practice (CoP) was introduced by Jean Lave and Etienne Wenger in 1991. They first used the term 'Communities of Practice' to describe learning through practice and participation which they named '*situation learning*'. They suggested that most of the learning for practitioners occurs in social relationships at the work place rather than in a class room setting. In this theory, the structure of the community was created overtime through a process of legitimate peripheral participation.

The legitimation and participation together defined the characteristic ways of belonging to a community. The peripherality and participation were concerned with location and identity in the social world. In their study, Lave and Wenger looked at how various apprenticeships help people learn. They found out that newcomers join the established groups, spends sometime observing and performing simple tasks as they learn and participate. They gave examples of midwives, craftsmen and tailors who learned their skills onsite in the environment where these skills were used.

Building on the '*situation learning*' theory, Wenger expanded the concept of Communities of Practice in 1998. He focused on socialization, learning and the individual's identity development instead of expanding the concept based on the apprentice-expert relationship. This was based on a case study on how medical claims processing clerks interacted with each other and share information. He described a community of practice as an entity bounded by three interrelated dimensions: mutual engagement, joint enterprise and a shared repertoire.

In 2002, Wenger, McDermott and Snyder in the study, '*cultivating communities of practice*', shifted their focus from individual learning and identity. They focused on providing a tool for organizations to manage 'knowledge workers'. Wenger et...al (2002) revised the three characteristics of CoP and named them, '*domain*', '*community*' and '*practice*'. The '*domain*' creates the common ground and outlines boundaries that enable members to decide what is worth sharing and how to present the ideas. The '*community*' on the other hand creates the social structure that facilitates learning through interactions

and relationships with others. The *'practice*, is a set of shared repertoires of resources that include documents, ideas, experiences, information and ways of addressing recurring problems. The practice is the specific knowledge the community shares, develops and maintain.

Wenger, McDermont and Synder (2002) defined Communities of Practice (CoP) as “*group(s) of people who share a concern, asset of problems, or a passion about a topic, and who deepen their knowledge and expertise in the area by interacting on an ongoing basis*”. They suggested that organizations can engineer and cultivate CoP as a managerial tool for improving an organization’s competitiveness.

McDermott (1999) identifies a community of practice as a group that shares knowledge, learns together and creates common practices. A community of practice is an organization’s versatile and dynamic knowledge resource and forms the basis of an organization’s ability to know and learn. Membership is usually self-selecting and people are held together by passion and commitment. Snowden (1998) stated that knowledge management is about optimizing tacit knowledge through creation of Communities of Practice. Communities of practice have stronger ties and more deliberate relationships. Communities of Practice act as living repositories of knowledge.

A community of practice can help one gain better understanding of how one’s practice functions as a complex interconnected adaptive system. Communities of Practice assist an individual in the delivery of services in order to develop knowledge, innovations and

change strategies in a timely manner. Therefore what people know depends on who they know and interact with. Their knowledge is a result of many interactions with colleagues and mentors.

Peterson (2012) states that it is generally agreed that tacit knowledge is very difficult to transfer from one employee to the other. He emphasizes that *“a community of practice is one strategy of helping knowledge transfer from the experienced, skilled, talented or from old employees to the younger and new employees. This ensures that knowledge can be retained in the organization when those who possess it depart”*.

Community of practice can exist in many forms and professions. Examples of communities of practice include reading clubs, associations such as library associations, study groups email discussion lists, etc. Communities of Practice (CoP) share three key dimensions according to Wenger et...al (2002): a domain of knowledge, a community and a shared practice. A Community of Practice may organize a round peer-to-peer problem solving, sharing best practices, updating and sharing for daily practice which generates new ideas and innovations.

Elements of communities of practice

a) Domain

A COP has an identity defined by a shared domain of interest. Membership implies a commitment to the domain, and therefore a shared competence that distinguishes members from other people.

b) Community

A necessary component is that members of a specific domain interact and engage in shared activities, help each other, and share information with each other. They build relationships that enable them to learn from each other.

c) Practice

The third component is that the members of COP are not only people interested in something but are practitioners. They develop shared repertoire of resources which can include stories, helpful tools, experiences, ways of handling typical problems etc. This kind of interaction needs to be developed overtime. Communities develop their practice through a variety of methods, including: problem solving, requests for information, seeking the experiences of others, reusing assets, coordination and synergy, discussing developments, visiting other members, mapping knowledge and identifying gaps.

Characteristics of communities of practice

According to the Wenger et...al (2002) communities of practice has the following characteristics:

- **Voluntary participation:** Members choose to participate due to the excitement of building new ideas and satisfaction of relationships.
- **Common interest or goal:** Communities are organized around topics that are important and meaningful to the members.

- **Common means to stay connected:** Communities stay in frequent contact using technology like web forums, emails and more traditional approaches like face to face meetings and teleconferences.
- **Willingness to share knowledge:** Members are willing and able to share what they know, respond to requests, and collectively solve problems. They build trusting relationships.
- **Facilitated not dominated:** Successful facilitators focus on recruiting and engaging members, not dictating content
- **Management not control:** Management provides tools and a supportive environment that includes giving employees the time to participate, and recognizing those who demonstrate an exemplary attitude toward sharing and community.

2.4 Application of the theory to the present study

This study has built on the work of Wenger et...al (2002) theory of communities of practice. Jain (2009) in a study '*Knowledge management in e-government*' stated that "*no technology or database can capture all knowledge required in an organization*". The study revealed that communities of practice were proven to be the most powerful tools for learning, sharing and for intellectual interaction and experience. Therefore COP can be used to capture, share and transfer tacit knowledge from retiring or older employees or experts to younger or new employees. This transfer process ensures that knowledge is retained in the organization even when employees depart from the organization.

KNLS library staff share a common profession and are united in accomplishing a common goal which is dissemination of information services to meet the needs of its clientele. Disterer (2001) states that in a Community of Practice, professionals care about certain topics by enhancing the ability of its members to think together, to stay in touch with each other. He further points out that these groups are bound to one another through a common class of interests, problems and a common pursuit of solutions.

KNLS library employees interact on an ongoing basis to solve their problems, look for new strategies to improve their services and meet their user's needs. A community of practice theory is the most effective in transferring tacit knowledge when the community operates in a local context. This is because many of the know-how and know-who are based on the efficacy of an individual's relationships that are strengthened by face to face contact. In this study, transfer of tacit knowledge at KNLS depended on various factors; e.g. the source, communication channel used, the absorptive capacity of the recipient, motivation, trust, context and culture, amongst others.

2.5 Data, Information and Knowledge

Data is a sum of raw, scattered, unrelated, unprocessed issues, facts and events, numbers and symbols without meaning (Semertzaki, 2011). Porat (1977) stated that information is data that has been organized and communicated. Data is the basis for the creation of information, while information is analyzed and organized data. Daniel Bell in Lee (2000) defines knowledge as a set of organized statements of facts or ideas, presenting a reasoned judgment or an experimental result, which is transmitted to others through some communication medium in some systematic form.

Lee (2000) states that information is visible, independent from action and decision, different in format after processing, physical product, independent from existing environment, easily transferable and duplicable whereas knowledge is invisible, closely related to action and decision, different in thought after processing, spiritual product, identified with existing environment, transferable through learning and not duplicable.

Knowledge is derived from information but it is richer and more meaningful than information. Through deciphering knowledge, we gain wisdom. Knowledge includes familiarity, awareness and understanding gained through experience or study and results from making comparisons, identifying consequences and making connections (Davenport and Prusak, 1998).

Davenport and Prusak (1998) define knowledge as “*a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information*”. They continued to emphasize that “*knowledge originates and is applied in the mind of knowers*”. Feather and Sturges (2003) defines knowledge as information evaluated and organized in the human mind so that it can be used purposefully. Nonaka et...al (2000) described knowledge as dynamic, since it is created in social interactions amongst individuals and organizations. They further insist that knowledge is context specific as it depends on a particular time and space and without being put into context, it is information not knowledge.

Therefore we can say that information becomes knowledge when it is interpreted by individuals and given context and anchored in beliefs and comments of individuals. Semertzaki (2011) defines knowledge as the baby of mental operations, the outcome of the thinking procedure of a person based on experience, education, cultural and socioeconomic background, information gathered and elaborated in the brain. Asoh et...al (2007 quoted in Semertzaki, 2011) identified information as the organized data and facts that existed outside the minds of individuals; whereas knowledge as a personal and individual attribute which is a synthetic product of information. Lee (2005 quoted in Semertzaki, 2011) states that knowledge is invisible; closely related to action and decision, spiritual product, identified with existing environment, transferable through learning and not duplicable.

The *World Development Report* (1998/99) in the topic *Knowledge for development*, defines knowledge as; “*knowledge is like a light, weightless and intangible, it can easily travel the world and enlighten the lives of people everywhere*”.

2.6 Types of knowledge

Human knowledge exists in different forms; according to Polanyi (1966) knowledge exists in two forms, namely tacit and explicit knowledge. Tacit and explicit knowledge are complimentary and are essential for knowledge creation. Nonaka et...al (2000) argues that explicit knowledge without tacit insight quickly loses its meaning. They further emphasize that knowledge is created through interactions between tacit and explicit and not from either tacit or explicit alone. Explicit knowledge as we have seen is knowledge

that is documented and public, structured with fixed content and externalized. Tacit knowledge on the other hand is personal undocumented knowledge, context sensitive, internalized and experience based. Polanyi (1966) emphasized that “*all knowledge is tacit knowledge or is rooted in tacit knowledge*”.

2.6.1 Explicit knowledge

Nonaka et...al (2000) and Kikoski and Kikoski (2004) describe explicit knowledge as what can be embodied in a code or a language and as a consequence it can be verbalized and communicated, processed, transmitted and stored relatively easily. Chen &Chen (2006) state that explicit knowledge is structured, formal, standardized and externalized with fixed content and systemized words. They further emphasize that explicit knowledge is easily communicated and shared. Ease of communication and transfer of explicit knowledge is its fundamental property.

Explicit knowledge is recorded in order to be retained for future generations and is mostly captured in libraries, archives, databases and cultural heritage institutions. Explicit knowledge is the output of tasks and activities of an organization in the form of reports, records, databases, procedures, etc. (Semertzaki, 2011). We can therefore say that explicit knowledge is knowledge that is found outside the heads of individuals.

2.6.2 Tacit knowledge

There are many definitions of tacit knowledge, but Michael Polanyi’s definition is widely accepted. Michael Polanyi encapsulates the essence of tacit knowledge in the phrase” *we know more than we can tell*” (Polanyi, 1966). According to Kikoski and Kikoski (2004)

tacit knowledge is the less familiar unconventional form of knowledge. They further described it as the knowledge of which we are not conscious of. They pointed out that tacit knowledge is not codified, it is not communicated in a language, and it is acquired by sharing experiences, by observation and imitation. They summarized that “*what is unsaid and unexpressed could be the reservoir of tacit knowledge*”. Therefore tacit knowledge can be said to be personal, hard to formalize and is rooted in actions, procedures, commitments, values and emotions.

Rosenberg (1982) describes tacit knowledge as “*the knowledge of techniques, methods and designs that work in certain ways and with certain consequences, even when one cannot explain exactly why*”. Nonaka (1991) explores the term further and states that tacit knowledge is highly personal and hard to formalize and therefore difficult to communicate to others. He further detailed his description that there are two dimensions of tacit knowledge. **First** is the technical dimension which encompasses the ‘know-how’ and the **second** is the cognitive dimension which consists of beliefs, ideas and values which is often taken for granted. From all the definitions we can say that tacit knowledge embodies an individual’s education, natural talent, experience and judgment.

Tacit knowledge is the know-how and learning embedded within the minds of people in an organization and involves perceptions, insights, experiences and craftsmanship. This knowledge is personal, context-specific, difficult to formalize, difficult to communicate and more difficult to transfer. Rowley (2003) summarized that tacit knowledge is that knowledge that resides in the minds, cultures and experiences within an organization.

2.7 Kinds of tacit knowledge.

Tacit knowledge can be defined as personal knowledge embedded in individual experience and involves intangible factors such as personal beliefs, perspectives and the value system. This personal knowledge is sometimes known as individual tacit knowledge. It is the knowledge that an individual possesses, natural talent or expertise that can neither be articulated nor transferred easily. Individual tacit knowledge can be transferred through social interactions and imitations. Another category of tacit knowledge is the collective knowledge or sometimes known as organizational tacit knowledge. This kind of tacit knowledge belongs to a group of people and has its own values, beliefs and unwritten norms that the group fully agree to and follow them. Tacit knowledge functions naturally as a background knowledge which assists in accomplishing a task in focus or at hand. Tacit knowledge can be grouped into various kinds as follows;

a) Embodied knowledge

This kind of tacit knowledge is also termed as the ‘know-how’, technical tacit knowledge. This kind of knowledge is action-oriented and consists of contextual practices. This knowledge is gained through experience and is context specific. It is life time accumulation of skills, training and competences. It has the ability and skill to do something. The know-how involves knowing how to obtain desired goals, knowing what to do in order to obtain something and when to do it and knowing how to perform an action. In this kind of knowledge, a person has the techniques or expertise, skills and practical know-how on how to perform a task efficiently and effectively.

b) Encultured Knowledge

This kind of tacit knowledge has the common concepts of socialization based on relationships and depends heavily on language. It is socially constructed and highly context specific. Examples of this kind of knowledge are culture, cultural matters, shared understanding, relationships and corporate mind set. This kind of tacit knowledge is grouped under the collective tacit knowledge category and is the process of achieving shared understandings through socialization and acculturation. Language and negotiation becomes the discourse of this kind of knowledge in an organization.

c) Embedded knowledge

This is a collective form of tacit knowledge residing in an organization's routines, joint experiences and collective norms. It is based on beliefs and understanding within an organization which makes effective communication possible. This kind of tacit knowledge is relation specific. It is organic and dynamic in nature and is capable of supporting complex patterns of interaction in the absence of written rules.

d) Embrained knowledge

This is a kind of tacit knowledge which is dependent on conceptual skills and cognitive abilities. Cognitive tacit knowledge consists of beliefs, perceptions, ideals, values, emotions and mental models so ingrained in people that we take them for granted. Although this kind of knowledge cannot be articulated very easily, it shapes the way we perceive the world around us. This kind of tacit knowledge is grouped under the individual tacit knowledge category.

2.7.1 Functions of tacit knowledge

We use tacit knowledge in our day to day life, e.g. when performing our routine duties like riding a bicycle, a car, or at home when carrying out household activities. When a person reads a book (explicit knowledge) he or she incorporates tacit knowledge to understand the meaning it carries and hence create new knowledge. Therefore tacit knowledge is used in various ways as follows;

- To create new knowledge. For any knowledge to be created there should be tacit knowledge which acts as the background in establishing new knowledge. Writing of story books, novels and plays amongst others requires the use of tacit knowledge to enable smooth flow of ideas and consistency. Brainstorming by a group of people results in knowledge creation.
- To perform routine activities. Some activities like household chores and many others do not have written manuals or procedures on where to begin work and where to end. These chores require skills, abilities and competencies to do a thorough neat job. For example a chef in a hotel uses tacit knowledge (skills, expertise and experiences) to prepare mouthwatering meals. Riding a bicycle or driving a car requires the use of tacit knowledge e.g. the skills a driver uses to complete a complicated maneuver cannot be replicate.
- In problem solving. Tacit knowledge helps in solving disputes such as family disputes, community disputes and conflicts. It is also used when answering mathematical equations.

- In decision making. Tacit knowledge assists in decision making through accumulated experiences, expertise, and know-how. It provides faster and reliable decisions.
- It brings about creativity and innovation. Tacit knowledge is knowledge that is not replicable. A person that has tacit knowledge in a given field has competitive advantage over the others. The organization that he/she works for looks forward to using the knowledge to attain creativity and innovation of its products and services. The introduction of Mpesa in Kenya was a new thing. Other companies and firms have also gone the same direction to create other money transfer services e.g. Airtel money and Yucash. The innovation of Mpesa has brought about Mshwari which acts as a mini-bank where individuals may save as well as get access to small soft loans. All this telemoney transfer and saving service centers started first as ideas from individuals with the use of tacit knowledge. The ideas were generated, the creators and innovators brainstormed to see if the idea was viable. With the idea being viable, these telemoney transfer and service centers were started one after the other one. These telemoney transfer service centers have bridged the financial gap between the rich and the poor in terms of access to financial services.

In science, tacit knowledge functions as follows:

- When identifying a research problem. Identification of a good problem must require tacit knowing that something worth discovering is near. A problem for explanation requires tacit knowledge.

- When making use of a scientific theory. The researcher must engage in an act of understanding the joint meaning of the theory and the facts to which it refers. This requires an intuitive understanding of the linkage between the theory and the facts.
- In understanding when and how to deploy formal methods. Scientists should understand when and how to deploy formal methods. Science demands intuition not only methodological testing of theory. In all these, tacit knowledge is essential and acts as background information.

2.8 Communication channels used in transfer of tacit knowledge

Communication is the exchange or sharing of information or knowledge by two people, or from one person to many. Communication is the social glue that keeps an organization tied together and acts a key process underlying all aspects of the organization's operations. Organizational structure directs the flow of information and describes the formally prescribed pattern of interrelationships existing between various units or departments. Communication channels refer to the way information flows within the organization. Sekeran and Bougie (2009) define communication as the process of conveying information from a sender to a receiver by the use of a medium in which the communicated information is understood the same way by both the sender and the receiver.

Communication channels in an organization can be formal or informal. An organization's formal communication represents its skeleton while its informal communication constitutes its central nervous system. Formal communication channels are organized and managed channels for communicating or sharing official information with others who need to know it according to prescribed patterns depicted in an organizational chart. Information may travel upward, downward and across following a chain of command. The downward channel is for routing directives, instructions and policies from top decision makers down through the organization to the people at various levels. The upward channel is the channel through which flow ideas, suggestions, criticisms and queries. The lateral or across communication is the most frequent and is known as routine communication. It occurs between people at the same level. Here employees interact constantly in their course of business. In formal communication, information flows via official channels e.g. written reports, memorandum and circulars among others.

Informal communication channels are undocumented channels, mostly oral, open to change, fast and cross organizational boundaries. Informal communication channels are used in some organizations to supplement the formal communication channels to give new ideas. In some organizations an amount of communication is done via informal channels, even when it is official. This is to say that much of the information is passed by a word of mouth among interested colleagues who have received it from various sources, briefings, memorandums, visits reports, etc. In this type of communication unwritten rules exist to ensure that information shared does not leave a particular set of people. Informal channels are such as grapevine, face to face, teamwork, meetings. Despite the

efficiency and speed of modern telecommunication technologies, there is no totally acceptable substitute for people talking and reacting close direct contact.

Knowledge is created by the flow of information and is anchored in the beliefs and commitments of the holder. Uncontrolled knowledge transfer is vital for the advancement of any company (Semertzaki, 2011). She further notes that personal communications and informal communications such as face to face meetings, contacts, observation, storytelling, are soft but important communication channels in transfer of tacit knowledge.

Tacit knowledge consists of the hands-on skills, special know-how, heuristics, intuitions, and the like that people cultivate as they engage in the flow of their work activities. Tacit knowledge is deeply rooted in action and comes from the simultaneous engagement of mind and body in task performance. Tacit knowledge is personal knowledge that is hard to formalize or articulate (Polanyi 1966). The transfer of tacit knowledge is by tradition and shared experience, through for example, apprenticeship or on-the-job training. Nonaka and Konno (1998) stated that tacit knowledge can be communicated through a process of dialogue, discussion, experience sharing and observation. Tacit knowledge in an organization ensures task effectiveness in that the right things are being done so that the work unit could attain its objectives. Tacit knowledge provides for a kind of creative robustness, intuition and heuristics. It can often tackle tough problems that would otherwise be difficult to solve.

The tacit knowledge transfer process is ultimately human to human and is inherently interactive and dynamic. Tacit knowledge transfer is enhanced if the environment is right that is, people involved, right conditions exist, right means are used and right actions are taken (Collison & Parcell, 2001). The best way to absorb tacit knowledge is to be present in the domain where tacit knowledge is practiced. This can be done through job rotation, job training, and on-site learning. This involves on-site decision making, absorbing the mechanics and the heuristics as they occur, and finally coming up with a new knowledge base that emulates the domain in a unique way. Therefore, right communication channels should be available to smoothly enhance transfer of tacit knowledge in the organization.

2.8.1 Story telling

Story telling has been identified as one of the mechanism that may be suited to transfer tacit knowledge. One of the most important characteristics of stories is that stories convey not only information but also meaning and knowledge (Thomas, 2001; Reamy, 2002). Stories exist in the realm of knowledge and are particularly suited to knowledge management instead of information management (Reamy, 2002).

According to Reamy, when representing the deep knowledge within stories, two different ways of using multimedia to capture the richness of stories have been identified. First is to create a movie that captures the story and /or exemplifies the story in a way that goes beyond simply a talking head telling a story; and the second is to create a multimedia representation of the elements of the story and their relationship. Shariq (1999) emphasizes that a more robust representation of knowledge in its intended form and

meaning is needed so as to capture and correctly convey the originator's knowledge. Reamy(2002) insisted that through the use of context, information contained in stories can be meaninglessly incorporated into the story, because it is easier for humans to remember knowledge rather than strings of unrelated bits of information. Reamy summarized that stories are also used as a medium to codify knowledge.

Foster (2010 as quoted in Semertzaki, 2011) points out that sharing of narratives stories of routine experiences in the form of oral internal history is a powerful device to communicate values and experiences.

2.8.2 Debriefing

In debriefing, the what, why, how and when of things is explored orally (Kransdroff, 2003). Debriefing was originally used in military campaigns and war games to question and examine persons who have returned from mission or exercise, to establish what has occurred and establish new strategies as a result of previous experience (Pearson and Smith, 1985). The present day context of debriefing refers to a purposeful reflection, which assists learners to develop generalization and to transform experience into learning. Debriefing is a powerful tool which make explicit any tacit learning so that it can be transferred to a wider audience. Lee et...al (2005) insist that the rationale behind debriefing is that individual learning can be enhanced by purposeful reflection. They further state that through debriefings; several individual lessons can also be aggregated, validated and synthesized to produce organizational learning.

2.8.3 Brainstorming

Brainstorming is a group creativity technique by which a group tries to find a solution for a specific problem by gathering a list of ideas spontaneously contributed by its members.

Brainstorming is defined as a process of generating creative ideas and solutions through intensive and freewheeling group discussions (BusinessDictionary.com, 2012)

Brainstorming with a group of people is a powerful technique which creates new ideas, solves problems, motivates and develops teams. Brainstorming leverages the collective thinking of the group by engaging each other, listening and building ideas.

Brainstorming can be summed up as a methodology used to bring out creativity and innovation. In the real world, different people have different levels of knowledge as well as different ways of looking at the same thing. Through this methodology, ideas, views and mental models are challenged, defended and modified.

2.8.4 On-job training

This type of tacit knowledge transfer channel takes place in the workplace in an informal or a formal manner. Most of the times it is done with no formal procedure, no specified goals and trainers usually have no formal qualification training experience for training but are selected on the basis of technical expertise or area of knowledge. In On-Job-Training, the participants observe a more experienced, knowledgeable and skilled employee or trainer. The employee or trainer provides continued direction of work to the trainee as he/she is trained on the job. There are various training methods e.g. coaching,

mentoring, job rotation and job instruction techniques. In a formal manner, On-Job-training is planned, organized and conducted at the employee's worksite.

On-job-training is used generally to broaden employee's skills and increase productivity as well as to develop proficiency skills unique to the employee's job. This kind of method of training lifts employee's morale, productivity and professionalism. Alipour (2009) in a study of "*On-job training effectiveness: Empirical study of Iran*", the study revealed that on-job training leads to more creativity, achieving organizational objectives and improves work quality.

2.9 Challenges and barriers to transfer of tacit knowledge

Challenges to transfer of tacit knowledge come into being because people may not perceive a clear business reason for pursuing the transfer of this knowledge and best practices. Tacit knowledge sharing is often one of the most challenging issues facing employers. They keep trying to develop effective ways to encourage employees to share what they have learned on their jobs, but it remains a difficult goal to attain due to the following challenges:

2.9.1 Knowledge hoarding

The term hoarding suggests a premeditated attempt to hide something away for your own future purposes. Most retained knowledge is not a result of premeditated hoarding; Gabriel Szulanski's work (2003) on why knowledge is not transferred (sticky knowledge) helps explain unintentional knowledge retention.

Fear and ambition mixed with a dollop of distrust creates a condition for knowledge hoarding. Fear is a strong emotion affecting behaviour. People will hoard their knowledge if they think sharing will result in punishment and also fear of competitors stealing their ideas. Bartol and Srivastava (2002) stated that individual employees are reluctant to share knowledge and expertise because the disclosure might lead to erosion of individual power. Knowledge hoarding also comes in when people or employees feel that an injustice has been done to them. They become distrustful of management and become afraid of negative job evaluations and figure out that they better off not share anything.

Another factor that may contribute to knowledge hoarding is the organization culture, if there is a culture of not sharing and being secretive, then employees tend to adapt to that culture. Some employees may want to hang onto their job knowledge which gives them a sense of power and importance because they have specific information and knowledge that no one else has.

2.9.2 Generation gap

Generation gap can be defined as difference in values and attitudes between one generation and another, especially between younger and their parents (The free online dictionary, 2013). The BusinessDictionary.com (2012) defines generation gap as *“differences in opinions, tastes, beliefs and other social and cultural norms that exist between older and younger age groups”*. The Business dictionary continues to define that *“these gaps are often widened by technological advances”*.

Generation gaps have always been a part of our world. These gaps bring the potential for areas of disagreements. Older people may be more sensitive about face to face communication while younger people especially those who are more exposed to global influences could have higher tolerance for face threatening situations. According to Carlson (2005) there are four distinct generations at the moment namely:

- Traditionists (mature or veteran) generation born 1925-1944. This group grew up in difficult times with life experiences that included World War II, great depression and during the colonization of Africa by the whites. The veterans are hardworking, financially conservative and cautious. The veterans are loyal, respect authority, supportive of hierarchy and disciplined in their work habits. Most of this generation has retired from active employment.
- Baby boomers generation born 1945-1965. This generation grew up in a post war economy, during colonial and post-colonial times. This generation has strong work ethics. This group as per Carlson (2005) prefers face to face communication, need recognition that celebrates the individual and the team. They do not want to be managed from a distance. Respects hierarchy.
- Generation X (born 1966-1984). The Xers are currently in active employment. In Kenya this is a group born after independence. This generation is reality driven, independent, problem solvers and resourceful. They are technology competent, multitask and resist hierarchy.
- Generation Y (born 1985-2004) Sometimes known as millennial This group is new in employment and some of them are still pursuing their studies in schools,

colleges and universities. This group is confident, team oriented and internet surfers. They are high achievers and value life outside work.

The four generations above may have many differences and vary on how they want to be managed. Their differences might be in views, goals, attitudes and work values which can result in misunderstandings and tension. These differences hinder transfer of tacit knowledge.

2.9.3 Hierarchical structures

Walton (1986) defines structure as “*the basis for organizing, to include hierarchical levels and spans of responsibility, roles and positions, and mechanisms for integration and problem solving*”. In more hierarchical organizations, managers have control over information and knowledge flow, and may desire to restrict access to critical information by lower level employees which could lead to significant organization barriers to sharing. Some organizational structures promote the dissemination and adoption of knowledge while other does not.

A hierarchical organization may have an equilateral triangle. A steeper pyramid indicates more management personnel than subordinates. Information and knowledge in this pyramid goes through a lot of processes before being executed. Communication across various sections can be poor especially horizontal communication. This type of organizations respond slowly to changes hence we can say that information delayed can be termed as information denied. A wider pyramid and flatter pyramid shape shows fewer

members of management and more subordinates. The processing and flow of information and knowledge is fast. The staff and management have a cordial relationship of interaction which paves way to sharing and transfer of ideas, experiences and best practices.

2.9.4 Competitiveness and job insecurity

When people acquire new knowledge, they believe that it is the key to their success and are likely to guard it instead of sharing. Many employees do not want to share the expertise they get through many years of hard work, due to competition. These employees feel that if they can solve problems they will be valued and get self-respect. Greenhalgh and Rosenblatt (1984) defined job insecurity as “*a perceived powerlessness to maintain desired continuity in a threatened job situation*”. They further maintained that “*job insecurity is based on individual’s perceptions and interpretations of the immediate work environment*”. Job insecurity in organizations leads to attitudinal reactions, intentions to quit, reduced commitment and reduced job satisfaction which makes transfer of tacit knowledge impossible.

2.9.5 Organization's culture

Culture can be defined as shared values, beliefs and practices of the people in the organization. Culture is embedded in the way people act, what they expect of each other and how they make sense of each other’s actions. Naftanaila (2010) states that culture resides in the values, beliefs and assumptions, norms that people have and use every day to guide their work. Delong and Fahey (2000) suggested that culture influences behavior

central to knowledge creation, sharing and use. Culture is rooted in core values of an organization therefore in an organization with a knowledge sharing culture; people share ideas and insights because they see it as natural rather than something they are forced to do.

Organizational culture can be described as ‘the way we do things around here’. Organizational culture provides a sense of identity to employees providing unwritten guidelines as to how to behave. Debowski (2006) describes the organizational culture as the collective perceptions, beliefs and values of employees in the work place while Deshpande & Webster (1989) opined that organizational culture as patterns of shared values and beliefs. They further stated that it helps individuals understand organization functioning and thus provides norms for behaviours in the organization. They summarized that organizational culture impacts the flow of knowledge through the organization as well as the willingness of the members to share and re-use knowledge.

Neo (2002) in a study of knowledge sharing practices in a Singapore news company found that cultural factors have significant impact on individual's decision to share or hoard knowledge. His study revealed that lack of motivation, management support, trust and teamwork spirit were considered as major barriers to knowledge sharing. This concurs with Albers (2009), in his study of ‘A practical approach in implementing knowledge management’. His study revealed that culture was critical in implementing knowledge management. He emphasized that an ideal knowledge management culture should be characterized by trust, openness, teamwork, collaboration, risk taking,

tolerance for mistakes, common language courage and time for learning. Firestone and McElory (2003) stated that cultural barriers were responsible for failures to share and transfer knowledge in organizations.

2.9.6 Physical barriers

Physical barriers refer to a large number of physical factors ranging from noise and bodily movements to ill health of either or both participant in communication process (Tripathi, 2009). Physical barriers are obstacles such as lack of conducive environment, geographical distances, staff shortage, noise, lack of time for interaction and physical disabilities. Blacker (1995) noted that poor and outdated equipment do not facilitate transfer of tacit knowledge. He further pointed out that staff shortages, work overload and pressure on productivity as well as deadlines in organizations causes communication difficult. This leads to lack of time to interact and identify colleagues in need or who possess special knowledge.

Another physical barrier that hinders transfer of tacit knowledge is noise. Noise is anything that gets in the way of effective communication which blocks or distorts the message (Oxford learner's dictionary online, 2012). The noise in tacit knowledge transfer can be ringing telephones inside or outside the room, people moving in and out of the room, mumbling, speaking too fast and distracting gestures from the sender of the message or recipients. Blacker (1995) stated that poor lighting; uncontrolled temperatures could affect people's morale and concentration which in turn interfere with knowledge transfer.

Geographical distance is also a physical barrier in transfer of tacit knowledge. Distance between the sender and the receiver of a message determines the effectiveness of transfer of a message. Semantic barriers such as language, use of complicated words or uncommon expressions hinders transfer of tacit knowledge. Semantic barriers occur when a sender and the receiver assign different meanings to the same word. Physiological barriers such as visual challenges, hearing problems and ill health hinder transfer of tacit knowledge.

2.9.7 Attitudinal challenges

Attitude is the beliefs and feelings people have about specific ideas, situations and people, which influence behavior. Cools and Van den Broeck (2006 in Martins & Martins 2011) defined attitude as *“a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object”*. Attitude comes about as a result of problems with staff in an organization.

Attitudinal barriers can be brought about by factors such as poor staff management, lack of consultations, personality conflicts which can make people refuse to communicate or share knowledge. Personal attitudes of individual employees which may be due to lack of motivation or dissatisfaction at work hence resistance to change. Disterer (2001) notes that if leading members of an organization are not comfortable with change and are not willing to take risks, then new ideas may be covered very easily and knowledge not culturally legitimated may be suppressed.

2.10 Use of tacit knowledge to attain innovation in libraries

Innovation helps organizations and various institutions to build and sustain competitive advantage. An organization's survival depends on its ability to innovate. Innovation in this era has become complex, costly and risky because of changing customer preferences, extensive competitive pressure, rapid and radical technological change (Cavusgil et...al, 2003).

The World Bank report of 1998 subtitled *Knowledge for Development*, points out that knowledge is needed to transform the resources we have into things we need and raise standards of living, improve health conditions, provide better education, and preserve the environment. Innovation is the base for organizational survival; Drucker (1954) was one of the first scholars to address the importance of innovation capability for organizations. He suggested that a firm has to be innovative to survive in a volatile environment.

Nowadays, the growth of cyber cafes, information bureaus and information consultation and information brokerage firms pose a threat to the existence of libraries as information as well as knowledge centers. Libraries must try and look for new knowledge and strategies to survive and prosper. Tacit knowledge is critical for firm's innovative capability (Cavusgil et al, 2003). Libraries as well as organizations could benefit from tacit knowledge transfer. Tacit knowledge can be activated by generating new scientific knowledge, (learning-to-learn), by incorporating new knowledge in the design of a new product (Senker 1993).

Tacit knowledge is gained throughout the innovation and production chain of a company, and Howells (1996) states that the stage at which tacit knowledge is gained and utilized in the innovation and production process is an important strategy and policy issue. The author concluded that tacit knowledge is a source of competitive advantage. The creativity necessary for innovation derives not only from obvious and visible expertise, but from invisible reservoirs of experience which need to get vitalized first, before using these in the innovation process.

Innovation comes in when a researcher or student undertakes a study and presents a report. In the study the researcher relies on the previous advice and technical materials found in books, journal articles, internal reports, databases, this explicit knowledge is used by the researcher to get information on the pursued study. The researcher then applies his or her tacit knowledge derived from education, training and experience combined with the information collected in the study to produce a report. The document is then handed over to the company or the requesting organization, and the report is given to staff to use, and then stored in a knowledge database to be accessed by others who will use it to create new knowledge in a continuous cycle.

Mchombu (2007) noted that embedded in tacit knowledge is the concept of creativity which includes use of figurative language and symbolism to articulate and share the insights and intuitions. Nonaka (1998) explains how creativity has been used by the Japanese companies to spur creation of new products. Cavusgil et...al (2003)

summarized that the greater the tacit knowledge transfers in the firm, the higher the capability of innovation.

Tacit knowledge is an important driver in the innovation process and its application will significantly impact on the innovation process and play a prominent role as a library or company resource and success factor.

2.11 Summary

This chapter has presented the theoretical framework upon which the study is based. It has presented literature on types of knowledge, kinds of tacit knowledge, communication channels used in transfer of tacit knowledge, challenges in transferring tacit knowledge and use of tacit knowledge to attain innovation in libraries.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology adapted in carrying out the study. It presents the research design, location of the study, target population and describes the sampling techniques used. It describes data collection instruments, pilot study which includes validity and reliability. This chapter also presents how data was analyzed and interpreted, ethical considerations are also presented.

3.2 Research design

A research design is a plan according to which the researcher will obtain research participants (subjects) and collect information from them (Michele, 2005). He further notes that it describes how the researcher is going to do with the participants, with a view to reaching conclusions about the research problem. Decision regarding what, where, when, how much by what means concerning an inquiry or research study constitute a research study (Kothari, 2004). He emphasizes that research design must at least contain; a clear statement of the research problem, procedures and techniques to be used for gathering information, population to be studied and methods to be used in processing and analyzing data.

Methodologies used in the previous studies to study knowledge transfer were primarily quantitative and mixed methods approaches. Szulanski (1996) applied quantitative method to examine the transfer of “best practices” among eight firms; Szulanski (2003)

also used quantitative approach to examine ‘stickiness associated with knowledge transfer in multinational enterprises’ in which the transfer were in multiple contexts; Simioni (1999) used a mixed method approach to examine ‘difficulties associated with transferring marketing knowledge’. The researcher in this study used a qualitative approach to get rich information about the transfer of tacit knowledge among library staff at Kenya National Library Services.

3.2.1 Qualitative approach

Qualitative research takes place in a natural setting where the researcher often goes to the site of the participant to conduct the research (Creswell, 2002). Mugenda and Mugenda (1999) define qualitative research as the research concerned with subjective assessment of attitudes, opinions and behaviour. This approach is intended to penetrate to the deeper significance that the subject of the research ascribes to the topic being researched. It involves an interpretive naturalistic approach to its subject matter.

In the study, this approach was humanistic and interactive and it allowed the researcher to build rapport and credibility with the respondents. It was emergent rather than prefigured and any changes that emerged during the study were accommodated. The study preferred this approach because qualitative research is used to explore and understand people’s beliefs, experiences, attitudes, behaviour and interactions. The study used in-depth interviews to find out more about the views and experiences of the respondents.

3.2.2 Interpretivism

Interpretivism is defined as an alternative research philosophy with its own ontological and epistemological assumptions (Orlikowski & Baroud, 1991). Interpretivism focuses on reality as a human construct which can only be understood subjectively. Interpretivism is the opposite extreme of positivism. Positivism sees reality as stable, external and governed by laws. This epistemology defines the researcher as detached from the subject being studied and relies on control and manipulation of reality. Positivist paradigm is usually quantitative in nature and involves hypothesis testing.

Interpretivist paradigm describes reality as created in that it is based on people's subjective experiences of their internal world. It treats people as though they are the source of their thought and feelings. Interpretivism poses that there are multiple realities, not single realities of phenomena and that these realities can differ across time and place. Kroeze (2012) states that "*the aim of interpretivism is to understand the subjective experiences of those being studied, how they think, feel and act or react in their habitual contexts*". Interpretive approach relies on naturalistic methods that ensure adequate dialogue between the researcher and those with whom they interact in order to collaboratively construct a meaning. Interpretivism is a qualitative research paradigm.

3.2.3 Case study

A case study can be defined as an in depth investigation of an individual, group, institution or phenomenon. It is a phenomenon of some sort occurring in a bounded context. According to Creswell (2002), case studies use sociological and anthropological

field methods such as observations in natural settings, interviews and narrative reports. He further pointed out that case studies may also use narratives and numerical data.

The overall purpose of this case study was to obtain detailed and comprehensive information about the research problem. The primary advantage of this case study was that it provided for thorough and detailed examination and analysis of the research problem and the findings were applied directly to the subject of inquiry. The advantage that was posed by KNLS as a case study was that the library had all aspects of library services for example, the library acted as national, public, referral and reference center for all libraries in the country. It had the best libraries with qualified professionals in librarianship. The researcher hopes that the findings of the study will have a general application to similar situations in the country with appropriate modifications. Case studies are said to be time consuming and may occasionally produce massive quantities of data that are difficult to summarize. To circumvent this difficulty, the study focused on the senior members of management and librarians of Kenya National Library Service.

3.3 Location of the study

The KNLS libraries in this study are located in Nairobi County. KNLS Upper Hill (CDBD, National and Nairobi Area libraries) located off Ngong road and Buruburu Public library located in Buruburu East of Nairobi Central Business District. Respondents for the study were: the senior members of management and library staff.

3.4 Target Population

Population refers to an entire group of individuals, events or objects having a common observable characteristic (Mugenda and Mugenda, 1999). Cooper and Schinder (2001) pointed out that “*a population is the total collection of elements about which researchers make some inferences*”. Population can be defined as the study object and consists of individuals, groups, organizations, human, products and events or conditions to which they are exposed (Michele, 2005). We can therefore say that population encompasses the total collection of all units of analysis about which the researcher wishes to make specific conclusions. The population for this study comprised of the management and the library staff of KNLS in Nairobi County.

3.5 Sampling methods

The researcher used stratified sampling and divided the population as per departments, after which purposive sampling was employed to select various departments and respondents as per the subject under study.

3.5.1 Stratified Sampling

The population was put into various strata depending on their departments. Payne (1990) argues that stratification involves ordering of the population into distinct groups or strata. Strata are therefore units of the population with distinct characteristics. The KNLS population was stratified as per departments. This stratification facilitated purposive sampling of departments and respondents. The researcher bore in mind the different job

designations and departments that entailed diverse work activities which required different types of skills, information and knowledge.

3.5.2 Purposive Sampling

Wadsworth (2007) states that “*in purposive sampling, we sample with a purpose in mind*”. The first things the researcher did, was to verify that the departments do meet the criteria for being in the sample. Although qualitative research design has been criticized for lack of bias, lack of reliability and validity, purposive sampling based on literature review and knowledge of the subject has helped to curb this. This study used purposive sampling to specifically select departments and respondents with a purpose in mind that the respondents do meet the criteria for being in the sample.

The purposive sampled departments were: National library, Nairobi Area Library, Collection Development and Book Distribution department and Buruburu library. The total population from all the four departments was 54. The senior members of management targeted as informants comprised: Deputy Director Technical Services (1), HOD Human Resources (1), Audit (1), Corporate Communications (1), Research and planning (1). There were five informants in this study.

The informants were selected due to the positions they held and duties performed at KNLS which informed the study. Some of the duties and responsibilities they perform are: recruitment, promotions, training and motivation of staff among other activities; carrying out auditing and performance appraisal of staff annually; managing the flow of

information and knowledge within and outside the institution. They were involved in policy and decision making in the institution. They provide guidance on formulation and implementation of strategies and policies in the institution.

Table 1: Purposive sampled departments

	Selected Departments	No. of Librarians (N)
1	National Library	8
2	Nairobi Area public library	12
3	Collection development	19
4	Buruburu public library	15
	TOTAL	54

Source: Human resources Dept. (June, 2012)

3.5.3 Sample size

Sample size refers to the number of items to be selected from the universe to constitute a sample. Patton (1990) observes that qualitative inquiry typically focuses in-depth on a small sample relatively even single case. Sekeran and Bougie (2009) points out that “*in qualitative research, a researcher does not determine the number of subjects that will be sampled at the beginning of the study*”. They continued to state that “*the general rule is that the researcher would continue to sample until no new information or no new insights are gained*”. As stated above, there are no rules for sample size in qualitative inquiry, the researcher looked into; what was useful; what had credibility; and what could be done

with available time and resources. The researcher interviewed the respondents via face to face interviews and data saturation was reached after interviewing thirty six respondents.

3.5.4 Research Procedure

After successful defense of the research proposal, the researcher with the acknowledgement of the supervisors and authorization from Moi University sought for a research permit from the National Council of Science and Technology which allowed her to carry out research (see Appendix VI pg.149). She requested for authorization from the KNLS management (see Appendix VII pg. 150), where she was introduced to various departments as per her request (see Appendix VIII pg. 151). The researcher was introduced by the Head of departments to the library staff who in turn introduced other colleagues to the researcher.

3.6 Data collection Instruments

In view of the in-depth nature of the study, data was collected using face to face interviews. The interview schedules were designed to include semi-structured questions to facilitate in-depth probing and prompting (See Appendices I pg. 142 and III pg. 145). Sekeran and Bougie (2009) note that the semi-structured interviews which consists of unstructured and structured interviews assists to explore and probe into the several factors in the situation that might be central to the broad problem area.

3.6.1 Interview

An interview guide is a powerful tool for collecting research data especially for qualitative investigation. Sekeran and Bougie (2009) state that interviewing has the advantage of flexibility in terms of adapting, adopting and changing questions as the researcher proceeds with the interview. Busher and Harter (1980) notes that an interview is always the best method for collecting data about the respondents themselves, their experiences, their opinions or attitudes, their knowledge, and their reactions to trends and developments.

Interview guides give an opportunity to establish rapport and greater flexibility in collecting information since the interviewee and interviewer are both present. Odi, (1993) emphasized that verbal responses of the respondents are often valuable original evidence. The researcher gained useful insights during interview situations. The face to face interview technique provided in-depth questioning which would not have been possible with the use of questionnaires. Peil (1995) notes that interview has a disadvantage of greater expenses in both money and time.

An interview schedule was prepared using structured and semi-structured questions. The semi-structured questions encouraged interviewees to discuss issues more openly and exhaustively. The interview schedule was used as a guide to standardize the interview situation such that the same questions were asked by the interviewer in the same manner.

The researcher had the following benefits from the face to face interview:

- There was high interactivity which led the respondent to answer very sensitive questions.
- There was high rate of response due to personal contact.
- The researcher could clarify an issue where necessary.
- The researcher could grasp non-verbal reactions from the respondent.
- The interview removed and reduced any doubts, misunderstandings and prejudices in respondents concerning the area of study.
- The technique had advantages of physical proximity.
- The method allowed instant interchange of opinion, views, attitudes and instantaneous feedback.
- The researcher found it easier to convince and persuade respondents

3.7 Pilot study

Pre-testing was carried out to test the instruments to be used. The purpose of pre-testing instruments is to ensure that items in the instruments are stated clearly and have the same meaning to all the participants (Mugenda & Mugenda, 1999). To ensure that the instruments measured what they were purported to measure, the researcher consulted with her supervisors for the purpose of examining the contents and validity of the instruments. The researcher then pre-tested the instruments on a sample of the five (5) respondents from the Nairobi Area public library and Buruburu public library. Information obtained was used to revise the instruments.

3.7.1 Validity and reliability

Validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure, while reliability is concerned with the accuracy of the actual measuring instrument or procedure (Michele, 2005). Sekeran and Bougie (2009) defined validity as a test of how well an instrument that is developed measures that particular concept it is intended to measure. In general, validity can be defined as the extent to which the instrument measures what it purports to measure and reliability is the extent to which any measurement procedure produces the same results on repeated trials. The research instrument that was used in this study was found to be valid and reliable after pretesting it on a number of respondents.

3.8 Data collection procedure

The researcher equipped with the research permit from the National Council of Science and Technology reported to the KNLS administrative offices at Buruburu to request for permission to conduct her research (see Appendices IV pg.147; V pg. 148; VI pg. 149 and VII pg. 150). The researcher was received by the Director Technical Services who in turn introduced the researcher to the various Heads of Departments through a written memo (See Appendix VIII, Pg. 151) as per the topic under study. The Heads of Departments in their capacity further introduced the researcher to other respondents in the departments who also did the same and introduced the researcher to the various staff. The researcher booked for appointments from the respondents to collect data (see Appendix I pg. 142). The introductions and data collection took place simultaneously. Data was collected through face to face interviews. Data saturation occurred when the researcher

could no longer receive any new data from the respondents. The data collected were already known statements and data saturation point occurred after interviewing 36 respondents. Data collection took a period of four and a half months.

3.9 Data presentation analysis and interpretation

Data was analyzed thematically by use of study objectives, research questions and responses from the interview guide. The researcher used descriptive narratives presented under various research questions. Where necessary, the researcher presented data in the form of tables, charts and figures.

3.10 Ethical issues

After receiving authorization from Moi University, National Council of Science and Technology and Kenya National Library Service, the researcher informed the respondents about the overall purpose of the study. The researcher assured the respondents and the institution under study on confidentiality, honesty, objectivity, integrity and legality in the whole research process.

3.11 Summary

This chapter has discussed the research methodology that was used to carry out the research study. It has presented the general research design, location of the study, population, sampling techniques, research procedure, data collection techniques and procedure, reliability and validity, data presentation, analysis and interpretation.

CHAPTER FOUR

DATA PRESENTATION ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter analyses and interprets the research findings in line with the study objectives and research questions. The findings have been analyzed, tabulated and recorded as percentages where appropriate. The data presented was collected from Kenya National Library Services Nairobi County (National library, Nairobi Area public library, Collection Development and Book Distribution department and Buruburu public library which currently acts as the new headquarters of KNLS).

The following is the sequence of data presentation, analysis and interpretation:

- Knowledge management practices at Kenya National Library Services
- Kinds of Tacit Knowledge among staff at Kenya National Library Services
- Communication channels used to transfer tacit knowledge at Kenya National Library Services
- Challenges or barriers faced by library staff when transferring tacit knowledge at Kenya National Library Service
- Enhancing transfer of tacit knowledge at Kenya National Library Services

4.1.1 Response Rate

The researcher reached a data saturation point after interviewing 36 respondents on face to face interviews. The respondents were from KNLS National library, CDBD department, Nairobi Area public library at the Upper hill branch and Buruburu public

library located east of NCBD. The inclusion of Buruburu Public library in the collection of data was due to the fact that KNLS Head Office Administration changed its venue and moved to BuruBuru public library to pave way for the construction of new KNLS storey building at Upper Hill Ngong road which is currently under construction. The researcher decided to collect data from both institutions after thorough consultations and approval from the first and the second supervisors.

4.1.2 Characteristics of Respondents

The study sought to find out the various characteristics of the respondents at KNLS. The background information of the respondents in this study was as follows:

i. Designation

The findings indicated that four (11%) of the respondents were heads of departments, six (17%) were head of sections, while twenty six (72%) were staff.

ii. Gender

The study found out that fifteen (42%) respondents were male while twenty one (58%) were female.

iii. Age

The study found out that five (14%) respondents were above the age of 51, nine (25%) were between ages 45 and 50, six (17%) were between ages 40 and 44, eight (22%) were between ages 35 and 39, four (11%) were between ages 31 and 34 and four (11%) were below 30 years.

iv. Academic Qualifications

The study found out that six (17%) of the respondents had Masters Degrees, fifteen (42%) had undergraduate degrees and out of this four (11%) of the undergraduates were pursuing master degrees. Twelve (33%) of the respondents had Diploma certificates and out of this six were pursuing Undergraduate degrees in various Universities. Three (8%) of the respondents had certificates in library and information sciences.

v. Years of Service

The study found out that five (14%) of the respondents had served for a period of over 35years, five (14%) respondents had served for a period of 25 to 30 years, six (17%) respondents had served for a period of 20 to 24 years, fifteen (42%) respondents had served for a period of 14 to 19 years and five (14%) respondents had served for 13 years and below. The study found out that thirty one (86%) of the respondents have worked for more that fourteen years and had enormous experience and expertise in the institution.

4.2 Knowledge Management Practices

The study sought to find out knowledge management practices at KNLS; policies governing knowledge management; how KNLS harnessed its knowledge and library staff participation in knowledge management. This objective further looked into skills and expertise of the library staff on knowledge management activities and the initiatives KNLS had taken to facilitate transfer of tacit knowledge.

4.2.1 Knowledge management practices at KNLS

The first objective of the study was to explore knowledge management practices at KNLS.

According to Kim (1999) *“knowledge management practices draw out the tacit knowledge people have, what they carry around with them, what they observe and learn from experience, rather than what is usually explicit”*.

Thirty two (89%) respondents stated that KNLS had knowledge management practices, four (11%) respondents stated that they were not sure if there were knowledge management practices in the institution.

The respondents stated the following as knowledge management practices in their work place:

a) Knowledge creation

The respondents pointed out that the key objective of the library was to provide information resources and information services to the public for knowledge and creativity. They pointed out that they required knowledge which acts as a key resource in the library's operation.

A respondent had this to say *“I need knowledge of the library users, their needs, knowledge of the collection and the library facilities available so that I can create new knowledge to improve and develop new services to satisfy our user needs”*.

The respondents stated that they created new knowledge through group discussions, brainstorming, staff meetings, staff evaluation reports and appraisals.

One of the respondents said *“I participate effectively in face to face group discussions in our section and forward questions on what I want to know, and when I get the answer, I apply it to the problem at hand and hence get new way on how to solve the problems at hand”*.

The key informants stated that they usually pick staff to work on research papers and present them in staff forums where the management and the staff participate effectively in asking and answering questions thus new knowledge is created.

The study found out that knowledge creation at KNLS was the outcome of an interactive process between the library staff themselves and as well as between the management and the staff.

b) Knowledge capturing

Tacit knowledge in an organization could be lost through retirement, retrenchment, death, search for greener pastures and even dismissals. Tacit knowledge in the heads of the people could be lost if not captured or transferred to another person. Therefore knowledge capturing is crucial for any institution.

Eighteen (50%) respondents stated that knowledge was captured through research papers presented by staff, academic qualifications and appraising staff expertise. Fourteen (39%) of the respondents said that they were not aware of any knowledge capturing activities at KNLS, while four (11%) respondents said that there were no activities on knowledge capturing.

This study concurs with Martins and Martins (2011) in their study on '*The role of organizational factors in combating tacit knowledge loss in organizations*'. The study revealed that the wave of knowledge loss and attrition that organizations were facing in a world of layoffs, retirements, death and mergers poses a threat and challenge to organizations. This therefore calls for knowledge capturing.

c) Knowledge acquisition

Twenty two (61%) respondents said they acquired new knowledge through outside trainings, social media, seminars, workshops and conferences, while fourteen (39%) respondents said that they acquired knowledge through reading manuals, interactions with friends through e-mails, reports, research papers and in-house trainings.

This study agrees with Maponya (2004) in a study of '*Knowledge management practices in academic libraries*' where the study revealed various knowledge acquisition practices such as establishing knowledge links with other libraries or institutions, attending trainings, conferences, seminars and workshops.

The key informants said that knowledge was acquired through in-house and outside trainings, attending conferences, workshops, cooperation and collaborations within KNLS departments and other institutions.

d) Knowledge sharing

Bennet and Bennet (2000) in their study on '*Characterizing the next generation knowledge organization*' argue that expertise exists in people and much of this kind of knowledge is tacit rather than explicit which makes it difficult to be shared. They further

stated that knowledge sharing in most cases depended on experiences gained inside the organization. They pointed out that it was the transferring of the tacit knowledge or know-how to colleagues thus eliminating duplication of efforts.

All the respondents said that they shared their knowledge and expertise in a daily basis at their work stations on a daily basis. The sharing process took place at staff meetings, presentations, social media forums (face book and LinkedIn), lunch time and during tea breaks. The respondents further pointed out that they shared their know-how and expertise during practical demonstrations and group discussions.

e) Knowledge transfer

In transfer of tacit knowledge, thirty (83%) of the respondents said that most of their tacit knowledge was transferred during the sharing process and practical demonstrations whereas six (17%) said that they were not aware about when and how they transfer but aware of receiving knowledge and expertise during sharing process.

Semertzaki (2011) pointed out that “*knowledge sharing fosters collaborations and generation of new ideas in organizations*”; she further noted that “*knowledge sharing and transfer are facilitated by communication, interactivity and reusability of knowledge*”.

f) Partnership with other libraries

The respondents stated that KNLS collaborated with other libraries, institutions and consortiums (e.g. PERII). In this collaboration practice, the respondents stated that they

acquire, share and transfer knowledge. The respondents also elaborated that they used the acquired knowledge from the partners to develop and improve library services.

4.2.2 Policies governing knowledge management practices at KNLS

Thirty four (94%) respondents pointed out that there was no written knowledge management policy governing knowledge management practices at KNLS. Two (6%) of the respondents said they were not aware if there were or were no policies that govern knowledge management practices.

The key informants said KNLS had not formally embraced knowledge management into the institution. They pointed out that there were no written policies to guide in knowledge management.

The key informants said *“knowledge management is a new subject in the field especially in libraries but knowledge management practices are practiced informally”*.

4.2.3 Harnessing knowledge at KNLS

The study sought to find out how KNLS harnessed its knowledge. Thirty one (86%) respondents said they harnessed their knowledge in the following ways.

- Through creation of valuable new knowledge and embedded in organizational practices and routines. Creation of the new knowledge at KNLS as per the respondents was via acquiring and sharing of knowledge through staff meetings, attending conferences, seminars, discussion forums, research presentations, job rotations, in-house trainings on best practices and expertise.

- Through the use of intranet as a knowledge management and sharing tool.

Five (14%) respondents stated that they did not know and were not aware of any knowledge harnessing activities at KNLS.

The key informants said KNLS intranet helped the management as well as the library staff to communicate, access, share, use and retrieve information and knowledge online.

4.2.4 Staff participation in knowledge management activities

The study sought to find out from informants the extent in which library staff were involved in knowledge management activities. The key informants said 61% of the library staff at KNLS both in Buruburu and Upper Hill were involved in knowledge management activities intuitively.

4.2.5 Skills and expertise of the library staff in knowledge management

The study sought to find out from the key informants if the library staff had the required skills and expertise to participate effectively in knowledge management activities. The key informants said 40% of the library staff did not have the necessary skills and expertise to participate effectively in knowledge management activities. They further pointed out that the KNLS management had considered training some of the staff through sponsoring them for Master of Science Degrees in Knowledge Management in order to provide in-house training to the other staff.

4.2.6 Initiatives taken to facilitate tacit knowledge transfer at KNLS

The study sought to find out from the key informants the initiatives KNLS had taken to facilitate transfer of tacit knowledge. The key informants interviewed said KNLS had taken initiatives to ensure that expertise and best practices of the employees that had been accumulated for a long period of time during employment was transferred to other employees. They pointed out that the transfer initiatives were semi-formal. The study revealed that the formal ways of tacit knowledge transfer were through job-rotation, on-the-job training, departmental staff meetings, organized in-house workshops and research. The informal initiatives were through open discussions, brainstorming and use of social media. According to the informants, KNLS had taken an initiative to sponsor some of its staff on knowledge management courses.

4.3 Kinds of tacit knowledge

The study sought to find out if the respondents knew tacit knowledge, the different kinds of tacit knowledge among library staff at Kenya National Library Services and if tacit knowledge was transferable.

4.3.1 What is tacit knowledge?

Twenty six (72%) respondent said they knew tacit knowledge is knowledge that resides in the head of the individual while eight (22%) respondents said they knew tacit knowledge as expertise and know-how that an individual has. Two (6%) respondents said they did not know what it was and they have never heard or come across it.

These findings concur with Rowley's (2003) findings in a study on '*Knowledge management: The new librarianship*'. The study revealed that tacit knowledge is knowledge which resides in the minds, cultures and experiences within an organization.

Jain (2009) in a study of '*Knowledge management in e-government*' summarized that

“tacit knowledge is hard to put to words because it is highly personal and hard to communicate or share with others”. Armstrong (2006) in the book '*Handbook for Human resource*' provided a definition of tacit knowledge as *“knowledge that we know, but has not been articulated or cannot always be articulated and people are not aware that they have this knowledge”*.

4.3.2 Kinds of tacit knowledge found among library staff at KNLS

The study found out that KNLS had various kinds of tacit knowledge both individual and collective knowledge. Twenty seven (75%) respondents said they had individual as well as collective tacit knowledge, six (17%) were not sure if they had individual or collective tacit knowledge, whereas three (8%) did not know if they had any tacit knowledge.

The key informants said the library staff had both individual and collective tacit knowledge. They stated that the individual tacit knowledge was a staff's personal knowledge, expertise, know-that and know-how. They pointed out that collective knowledge was knowledge shared by the staff in a section, a group or a unit in terms of work processes, procedures and daily routines in the work place.

a) Individual tacit knowledge

The individual tacit knowledge is the knowledge present in the minds of the library staff. It is the untold or unexpressed implicit knowledge which includes skills, experiences and know-how. Individual tacit knowledge has abilities to solve problems, ability to acquire new knowledge and ability to accept new changes and trouble shoot new technologies. This individual tacit knowledge is cognitive in that it reflects the personal intuition, insight, beliefs, values and mental models. This tacit knowledge exists in the library staff's potential qualities and personality.

A respondent had this to say *“I have worked for over 30 years in this library and I know each and every corner of this building, I have once been assigned to set up some of the libraries in Kenya in various provinces and I am an expert in that”*.

Another respondent had this to say *“I know all the processes that we carry out at KNLS and I can write over 200 pages about this library”*. The respondent continued *“I have worked in this section for 20 years and all the procedures, routines, rules and regulations of cataloguing and classification are all in my mind. I do not need AACR2 or a classification manual to guide me”*.

This study concurs with Jacobs & Roodt (2007) in their study *‘The mediating effect of knowledge sharing between organizational culture and turnover intentions of professional nurses in South Africa’*. The study summarized that individual tacit knowledge is deeply rooted in individual experiences, ideas, values and emotions. The study further revealed that individual tacit knowledge was based on individual competences, experience and skills.

b) Collective tacit knowledge

Twenty seven (75%) respondents stated that they had collective tacit knowledge that was found in routine procedures, embedded in library processes and rules of their sections and informal group discussions.

One respondent said *“in my group discussion forums, we have our own unwritten rules which guide us in our informal discussions”*.

Another respondent said *“In our section we have routine procedures and every one of us knows off head”*. The respondent continued *“we perform our tasks equally without one noticing any difference even when one is on leave”*.

4.3.3 Transferability of tacit knowledge

The study sought to find out from the respondents if tacit knowledge was transferable.

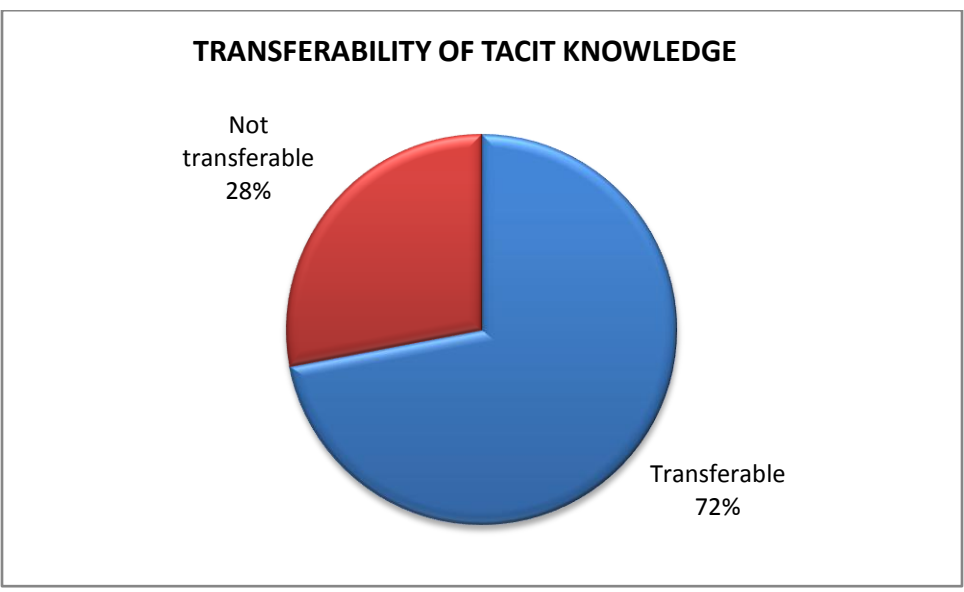


Figure 1: Presents responses from the respondents on transferability of tacit knowledge

Twenty six (72%) respondents stated that tacit knowledge was transferable. The respondents narrated that the know-how and expertise such as binding skills, indexing, cataloguing and classification skills were transferrable after a period of time while working practically with the expert cataloguer. The respondents pointed out that the tacit knowledge was transferred during face to face interactive knowledge sharing; they gave examples such as hands-on training, on-job training, internship training and informal discussions. Whereas ten (28%) respondents said tacit knowledge was not transferrable. These respondents argued that the know-how and expertise was hard to transfer since the process was complex, time consuming and required a lot of patience to fit into another person's shoes.

The informants stated that tacit knowledge was transferable. They argued that tacit knowledge was transferred through job rotation, practical demonstrations, trainings and mentoring. They pointed out that the institution had not laid down strategies and policies to aid tacit knowledge transfer although the activity was done informally.

This argument resembles Nonaka and Takeuchi (1995) definition when they described

tacit knowledge as *“knowledge that has been transformed into habit, and is highly context-specific and has a personal quality hence difficult to transfer”*.

4.4 Communication channels used in transfer of tacit knowledge at Kenya National Library Service

The study sought to find out the communications channels used by library staff to transfer tacit knowledge at Kenya National Library Service, the effectiveness of the channels and

the best communication channels preferred by the respondents in tacit knowledge transfer. It pursued to find out from the respondents the best communication channel to transfer tacit knowledge in a multi-generational work place and to suggest considerations to ensure smooth transfer of tacit knowledge.

Table 2: Communication channels used at KNLS to transfer tacit knowledge

NO	Formal communication channels	No. of responses	Percentage	Informal communication channels	No. of responses	Percentage
1	Staff meetings	20	56%	Tea Break	12	33%
2	Presentations of research papers	13	36%	Lunch Break	10	28%
3	Trainings(in-house/outside trainings)	14	39%	Social Media(face book & LinkedIn)	8	22%
4	Written procedures & manuals	5	14%	Group discussions	16	44%
5	Workshops, seminars & conferences	17	47%	Brainstorming	28	78%
6	Practical demonstrations	18	50%	Practical demonstrations	34	94%
7	KNLS Intranet	16	44%			

Table 2. *Presents communication channels used at KNLS to transfer tacit knowledge were semi-formal.*

The most used communication channels were; practical demonstrations, brainstorming and staff meetings which are face to face interactive communication channels. The key informants said although the communication channels used in transfer of tacit knowledge were semi-formal, 80% of the communication channels used by the library staff to transfer tacit knowledge were informal.

4.4.1 Effectiveness of communication channels used in transfer of tacit knowledge

Twenty two (61%) respondents said the communication channels were effective whereas fourteen (39%) respondents said the communication channels were not effective enough to aid transfer of know-how and expertise.

4.4.2 Preferred communication channels

Twenty six (72%) respondents stated that they preferred brainstorming and practical demonstration which were face to face interactive communication channels to transfer know-how and expertise to another person, new employee or intern. These respondents reiterated that face to face interactions were effective and knowledge shared would be transferred smoothly.

One respondent said “*I prefer face to face communication channels for example practical demonstrations and brainstorming because it is easy in terms of recall than written procedures*”.

Another respondent had this to say *“I prefer face to face communication channels because it brings the message directly from the source and the message is pure with no distortion in it”*.

Collison and Parcell (2001) in a study of *‘Learning to fly-Practical lessons from one of the World’s leading knowledge Companies’*, the study established that *“tacit knowledge transfer process is a human to human process and that this process is inherently interactive and dynamic”*.

Eight (22%) respondents preferred written procedures, manuals and electronic mail whereas two (6%) respondents preferred practical demonstrations, use of talking books and sound recordings due to visually challenges.

4.4.3 Best communication channel to transfer tacit knowledge in a multigenerational work place

The study sought to find out the best channel to use in a multi-generational work place. Sixteen (44%) respondents said the best communication channel to transfer tacit knowledge in a multi-generational work place was brainstorming, twelve (33%) said practical demonstrations was the best communication channel, seven (19%) said social media was the best communication channel while three (8%) chose written procedures and manuals.

One respondent had this say *“social media and electronic mail in a multi-generational work place is best to bridge the gap between the older generation and the younger*

ones". Another respondent said face to face interactions create a bond between the young and the old and the message is clear without any distortions.

The key informants stated that coaching and mentoring were the best communication channels to transfer tacit knowledge in a multi-generational work place. They pointed out that these communication channels would control differences in age, interests and culture.

4.4.4 Considerations to ensure smooth transfer of tacit knowledge

All the respondents agreed that the best way to transfer tacit knowledge was first to consider the audience, then choose a channel that matches the needs of the audience and the subject content.

4.5 Challenges encountered in transfer of tacit knowledge at KNLS

The study sought to find out the challenges encountered by the library staff in transfer of tacit knowledge.

Table 3: Multiple responses on general challenges on transfer of tacit knowledge at KNLS

No.	Challenges/barriers to transfer of tacit knowledge	Frequencies (multiple responses)					
		Staff /staff		Staff / New employee		Staff to Interns	
		No. of responses	Percentage (%)	No. of responses	Percentage (%)	No. of responses	Percentage (%)
1	Knowledge hoarding	23	63.8	8	22	5	13.8
2	Lack of trust	18	50	7	19	-	
3	Arduous Relationship	14	38.8	12	33		
4	Lack of motivation	30	83	--	-	-	-
5	Inadequate training	21	58	19	52.7	19	53
6	Inappropriate communication channel	8	22	10	27.7	6	16.6
7	Physiological factors	16	44	8	22	3	8
8	Fear	12	33	-	-	-	-
9	Language barrier	14	38.8	10	27.7	12	33
10	Lack of knowledge on the subject	3	8	-	-	-	-
11	Attitudinal barriers	18	50	-	-	-	-
12	Age gap	18	50	22	61	16	44
13	Technophobia	6	16.6	8	22	-	-
14	Distance	4	11	-		-	
15	Culture	18	50	19	52.7	-	-
16	Lack of knowledge management awareness, programmes & policies	27	75	-		-	

a) Knowledge hoarding

Twenty three (64%) respondents said that knowledge hoarding was a barrier in transferring the know-how and expertise from one staff to another.

One respondent had this to say *“in the library there are those colleagues who are ‘free riders’ and refuse to share what they have; hence I also do not want to share with them nor transfer my expertise to them since they hoard theirs”*.

Another responded said *“I fear losing control of the knowledge I have, because this knowledge and expertise makes me who I am”*.

The findings concur with Arora (2002) in the study of *‘Implementing Knowledge management: A balanced scorecard approach’*. The study revealed that *“due to unhealthy competition and spirit of rivalry between the organization departments, people may be unwilling to share their knowledge”*.

Eight (22%) respondents revealed that they did not want to share with new staff due to fear of criticisms, past experiences, fear of unknown and reluctance by the new staff to follow instructions.

One respondent said *“when I am showing new staff work to do he/she just respond yes, yes, on what I teach, hence I do not know whether he/she has gotten what I said but after some time you realize that the person has a different way of doing the same task but does not want to tell you so”*.

Five (14%) respondents said that interns did not want to communicate the knowledge they have in order for trainers to judge the level to teach and train them.

b) Lack of trust

Eighteen (50% respondent said they did not trust some of their colleagues hence become a challenge in transferring know-how and expertise from one staff to the other.

One respondent said “*One has to be your real friend apart from being a colleague for me to trust*”.

Seven (19%) respondents pointed out that they did not trust new employees and this brings a challenge in transfer of tacit knowledge.

One respondent said “*how can I trust somebody I do not know, it has to take quite some time to trust him or her*”.

Another said “*I fear losing my position and superiority to the new staff*”.

The findings concur with Naftanaila (2010) in a study on ‘*Factors affecting knowledge transfer in projects environments*’ The study found out that most people are unlikely to share their knowledge and experiences without a feeling of trust. The study revealed that “*people must have a feeling of trust that the people will not misuse their knowledge and that the information that one receives is accurate and credible due to the source of the information*”.

c) Arduous Relationship:

Fourteen (38.8%) respondent said having a relationship with a colleague is important in transfer of tacit knowledge. The respondents argued that without friendship or any relationship then it is hard to transfer know-how and expertise.

One respondent said *“friendship and relationship is vital for effective transfer of know-how and expertise because without relationship I cannot be fully open to you to let you know my secret tools of trade which makes my work excel”*. The respondent continued to say *“if I have no relationship with you as a discussion group member, as a buddy or chatting partner, then it’s hard for you even to learn the tricks of my know-how and expertise”*.

Twelve (33%) respondents said that it was also a big challenge when transferring expertise and know-how to newly employed persons since one does not know the person, his/her interests as well as how the new staff would take whatever one would share with him/her.

These arguments concur with what Hansen et...al (1999) in his article on “what’s your strategy on managing knowledge”. He summarized that *“strong ties are needed between the transfer participants for complex knowledge to be exchanged effectively”*.

d) Lack of motivation

Thirty (83%) respondents said the biggest challenge in transfer of tacit knowledge from one staff to the other was lack of motivation. The respondents narrated that they were not motivated enough to transfer the expertise and know-how due to poor remuneration, lack

of promotions, lack of incentives and rewards. A respondent argued that there was no recognition of expertise and jobs well done or research papers which led to lack of motivation to transfer tacit knowledge.

One respondent said “*high quality work is ignored and productive performance is overlooked*”.

Szulanski (1996) on the study ‘*Exploring internal Stickiness: Impediments to the transfer of best practice within the firm*’. The study revealed that “*in order to encourage people share their knowledge, they should be adequately rewarded*”.

e) Lack of adequate training

Twenty one (58%) of the respondents said that inadequate training was a challenge in tacit knowledge transfer. The respondents insisted that the institution should keep up with new technological and curriculum changes through continuous training of staff. The respondents pointed out that training would allow the source (knowledge provider) to impart know-how and expertise to the recipients. Nineteen (53%) respondents said that due to changes in universities and college curriculums it was hard to transfer expertise and know-how to new staff and interns.

Source

The respondents said that acting as a source of knowledge or idea in the sharing and transfer process with other staff was a challenge. Eighteen (50%) respondents named many challenges such as poor listening skills of the recipients, unnecessary interruptions

by recipients during a presentation (e.g. use of mobile phones), lack of knowledge on the subject matter by the recipients, lack of cooperation and collaboration on the task at hand.

One respondent had this to say *“there is no need to transfer any knowledge if the recipient cannot understand and apply it to his/her daily practices”*.

Twelve (33%) of the respondent said while acting as a source in training new staff, they found it a challenge in that the new employees speak fluent English and use terms not familiar with them when asking questions of which the source did not know.

Another respondent said *“due to mother tongue interruptions I find it very hard to present or train someone to do something because I fear he/she may criticize me”*.

Another respondent stated that some staff when acting as a source of knowledge lacked the will and aptitude to share as well as transfer their expertise to other people. Eight (22%) respondents said when transferring their expertise to the interns, the main challenge was that the interns kept quiet without asking questions hence the trainer could not know whether they have learnt or not.

f) Recipient

As a recipient of knowledge, sixteen (44%) respondent said some of the sources were neither knowledgeable nor reliable in the subject matter they were presenting.

Another respondent said *“due to lack of motivation we find the source dull and not presenting with us in mind but doing it to end and go away”*.

The study found out that some of the recipients had problems with absorptive capacity due to lack of education on the subject and low level ICT literacy skills which acted as barriers to transfer of tacit knowledge.

This study concurs with Szulanski (1996) findings when studying “Exploring internal Stickiness” in which the study revealed that *“most important barriers to the internal transfer of knowledge within a company are recipient’s lack of absorptive capacity, casual ambiguity and arduous relationship”*

g) Inappropriate communication channel

The respondents said use of inappropriate channels to transfer the know-how and expertise from staff to staff, staff to new employees and staff to interns acted as a barrier (see Table 3, line 8 pg. 81). They said different people prefer different communication channels. The respondents narrated that use of power point and issuing recipients with notes in some presentations was inappropriate because some of the staff had physiological challenges and needed hands-on training. The respondents pointed out that the source should take into consideration the audience, the environment and the subject content when choosing the channel to enable effective transmission of the message.

h) Physiological factors

Sixteen (44%) respondents said physiological factors such as ill health, poor/loss of eye sight and hearing difficulties were challenges in transfer of tacit knowledge. One respondent argued that during staff research presentations and presentations by outside or in-house facilitators, these groups of people were not taken into consideration. The facilitators use power point to present their works but the visually challenged recipients could not see thus created a barrier.

Eight (22%) respondents said physiological factors hindered transfer of tacit knowledge to new staff and three (8%) said it hindered transfer of tacit knowledge to interns. The respondents pointed out that it was due to inadequate modern equipments, such as talking books, Braille, sound recordings and computers.

i) Fear

Twelve (33%) respondents said fear of unknown, fear of criticisms, fear of losing ownership and control of the practice or expertise and fear due to past experiences were barriers to transfer of tacit knowledge.

j) Language barrier

Fourteen (39%) respondents said use of hard vocabularies, semantics, accent and dialect presented a barrier to transfer of tacit knowledge. Ten (28%) said they had challenges communicating effectively with new staff. Twelve (33%) said they had problems communicating with interns because of use of terms which they felt the interns were new to.

One respondent said *“some people use difficult words when transferring their know-how and expertise for example in demonstration of how to perform a certain task, these difficult words prevent me from getting the message”*.

Another respondent said *“some messages are poorly explained hence they are misunderstood and sometimes result in confusion”*

k) Lack of knowledge on the subject

Three (8%) respondents argued that lack of knowledge on the subject matter by the source and sometimes recipients was a barrier in transfer of tacit knowledge.

Leonard (2007 in Naftanaila 2010) remarked that *“ease of transferring knowledge from one individual to others can be affected by the size and nature of the gap of knowledge between the source and the recipient”*.

l) Attitudinal barriers

Eighteen (50%) respondents said attitudinal barriers came as a result of problems within staff in the organization.

One respondent said *“these attitudinal barriers are brought about by lack of consultations with fellow colleagues, fear of criticism and lack of motivation”*.

Another respondent pointed out that attitudinal barriers was brought by insufficient training hence the staff were unable to perform a given task which just led to resistance to change and collaboration due to entrenched attitudes and ideas.

m) Age gap

The respondents said that age gap were a challenge to transfer of tacit knowledge. Eighteen (50%) respondents pointed out that the age gap was a challenge to transfer of tacit knowledge from one staff to the other. Twenty two (61%) respondents said age gap was a challenge when transferring tacit knowledge to new employees. Sixteen (44%) respondents said due to age differences, language and different learning styles, transfer of tacit knowledge was a challenge.

One respondent argued that *“young people should follow advice from older people but sometimes I find that some young people do not want to be told or taught anything; they pretend to know all yet they were employed recently”*.

One respondent said newly employed staff were self-independent and could not approach the older ones for assistance and guidance. Another respondent pointed out that difference in learning styles; problem solving and decision making were barriers to transfer of expertise and know-how among the older and younger employees.

This study concurs with Young (2012) in the study *‘Bridging the age gap’*, The study revealed that transfer of knowledge and skills from the experienced generation to new college graduates required organizational commitment, strong development, coaching programs and sophisticated training capabilities.

The key informants said age gap was a barrier in transfer of tacit knowledge. They pointed out that difference in decision making, ICT literacy skills and difference in culture brought a gap between the age groups. They further blamed the introduction of *“sheng”* as a language of discourse which had brought a wide divide between generations in the work place.

n) Technophobia

Six (17%) respondents responded that lack of ICT literacy skills was a challenge to transfer of tacit knowledge.

One respondent said *“I can share my expertise and know-how through social media e.g. through face book, but the problem is that I do not have the skills to maneuver*

through the computer in order to interact with other people and share my knowledge”.

Another respondent pointed out that the younger generation had excellent ICT skills which intensified digital divide between the young and the older generations.

Senior members of the management interviewed stated that although KNLS had acquired computers and taken staff for training, there was still few staff who were not ICT literate. They stated that this was due to resistance to change and technophobia.

o) Distance

Four (11%) respondents said that distance was a challenge to transfer of tacit knowledge. One respondent had this to say *“most of the experts are at KNLS upper hill so we have to travel all the way to be trained or shown what we need to know”*. The respondent continued *“communications online or being given steps to follow is not enough, I need practical training”*

p) Culture

Eighteen (50%) respondents said cultural barriers such as cultural background, popularity, aspirations, assumptions; temperament and priorities separated one person from another and created a barrier. Other cultural barriers narrated by the respondents included organizational culture, lack of organization’s knowledge sharing culture, staff shortage, lack of opportunities for growth and improvement.

This study concurs with Neo (2002) in a study of knowledge sharing practices in Singapore News Company. The study revealed that cultural factors had significant impact on individuals' decision to share or hoard knowledge.

q) Lack of knowledge management strategies and policies

Twenty seven (75%) respondents stated that lack of knowledge management strategies and policies at KNLS was a barrier to transfer of tacit knowledge. The respondents pointed out that the strategies and policies could guide in effective management of both the tacit and explicit knowledge as well as create a knowledge sharing and transfer environment.

4.5.1 Challenges that hindered transmission of tacit knowledge (when acting as the source)

The study sought to find out the challenges that hinder transmission of tacit knowledge from the source to the recipients.

Table 4: Multiple responses from respondents on challenges that hindered transmission of tacit knowledge at KNLS (when acting as the source)

NO.	Challenges that hindered transmission of tacit knowledge	Responses		Details of responses (“.....”)
		Multiple responses (No.)	Percentage (%)	
1	Resistance from recipients	18	50	Unwillingness from the recipients to contribute or ask questions. Poor listening skills of recipients, lack of cooperation and collaboration on the task at hand.
2	Context	16	44	The environment not conducive for learning e.g. sometimes the temperature is too hot where a recipient sleeps or takes nap. Sometimes the temperature is too cold for the recipients to concentrate.
4	Noise	32	88.8	Distractive noise from the background e.g. use of mobile phones, people moving in and out.
5	Equipment	10	27.7	Outdated equipments, shortage of equipments and lack of modern equipment for practical use by the recipients.
6	Attitude	17	47	This happens due to personal perceptions or past experiences. People are rated as incapable of performing or accomplishing tasks thus recipients do not want to pay attention to what is being presented.
7	Lack of motivation	21	58	Lack of recognition and rewards hinders transfer of tacit knowledge.
8	Lack of trust	18	50	Lack of relationship with the recipient
9	Fear	12	33.3	Fear of unknown, past experiences, fear of victimization and fear of losing ownership of the knowledge.

Table 4. *Presents multiple responses of the respondents*

These responses indicated that the major challenges in transmission of tacit knowledge from the source to the recipient(s) at KNLS were; noise, lack of motivation, lack of trust, resistance from recipients and attitudinal barriers.

4.5.2 Challenges that hindered reception of tacit knowledge (when acting as the recipient)

The study sought to find out the challenges that hindered reception of tacit knowledge at KNLS

Table 5: Multiple responses from respondents on challenges that hindered reception of tacit knowledge (when acting as the recipient)

No.	Challenges that hindered reception of tacit knowledge	Multiple responses		Details of responses (“...”)
		No	Percentage (%)	
1	Language barrier	12	33	The source used difficult words, semantics, accents and mother tongue interruptions
2	Inappropriate communication Channel	6	16.6	The channel used was inappropriate for the audience e.g. use of power point, issuing written manuals instead of practical demonstrations
3	Context	16	44	Lack of controlled room temperatures and the sitting arrangement and layout.
4	Source	15	41.6	The source was not knowledgeable in the subject area. Lack of clarity of the source in delivering the message, mother tongue interruptions and use of semantics
5	Physiological factors	10	28	Factors such as ill health, poor eye sight and hearing difficulties
6	Attitudinal barriers	16	44	Poor perception, insufficient training and lack of motivation
7	Noise	20	55.5	Background noise disruptions, ringing phones and mother tongue interruptions(MTI)
8	ICT illiteracy	4	11	Technophobia due to lack of ICT literacy skills
9	Inadequate equipment	10	27.7	No enough equipment to provide hands-on training.

Table 5 presents the challenges hindered reception of tacit knowledge

The major challenges were; noise, context, attitudinal barriers and the source.

4.5.3 Challenges that hindered transfer of tacit knowledge in a multi-generational work place

The study found out that lack of trust, age gap and lack of motivation, attitudinal barriers and different learning styles were the major challenges that hindered transfer of tacit knowledge in a multi-generational work place as shown in Fig 2.

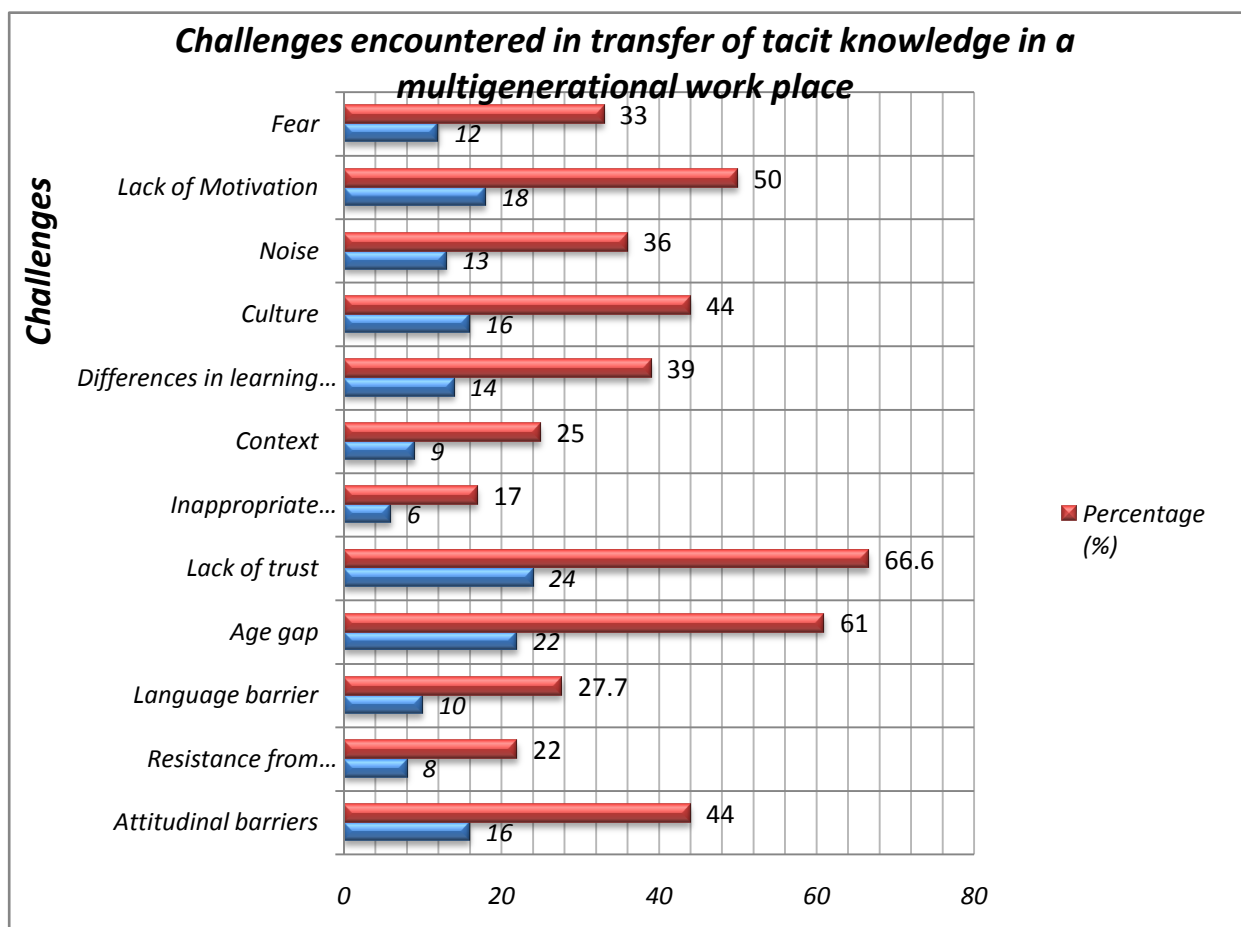


Figure 2: Presents multiple responses from respondents on challenges and experiences encountered when transferring tacit knowledge in multi-generational work place

4.5.4 Techniques adopted by respondents to overcome challenges in transfer and reception of tacit knowledge

The study sought to find out how respondents overcame challenges in transferring tacit knowledge.

a. Overcoming transfer challenges

Thirty (83%) respondents said they used face to face interactive communication channels (brainstorming, group discussions, staff meetings & practical demonstrations) and the intranet to transfer their know-how and expertise to other staff. Six (17%) said they used written procedures and staff meetings.

b. Overcoming reception Challenges

Thirty two (89%) respondents stated that to overcome reception challenges they used practical demonstrations and brainstorming methods, while four (11%) said they used written procedures.

4.5.5 Initiatives that the KNLS management had taken to ensure efficient and effective transfer of tacit knowledge

Twenty four (68%) respondents said the management had tried to ensure effective transfer of tacit knowledge by sending people to seminars, conferences, initiating weekly staff meetings, open discussions with the management, communication through e-mails, intranet and social media. Twelve (44%) respondents said the management had not put enough efforts to ensure effective transfer of tacit knowledge.

One respondent said *“I have never attended a course, a seminar, a conference or training for the last three years. I just watch people go and come back, but they neither share what they have been taught nor what they have learned”*.

4.6 Enhancing transfer of tacit knowledge at KNLS

The study sought to find out from the respondents the measures taken to ensure smooth transfer of tacit knowledge, how it could be used to improve library operations and how to enhance transfer of know-how and expertise to fellow colleagues, new employees and interns. It further pursued to find out from the respondents if enhancing transfer of tacit knowledge would improve performance, attainment of innovation and competitive advantage at KNLS.

4.6.1 Suggestions from respondents on measures to ensure smooth transfer of tacit knowledge at KNLS

The study sought to find out suggestions and recommendations from the respondents on measures to be put in place to ensure smooth transfer of tacit knowledge (Figure 3). The findings indicated that motivation, teamwork, provision of a knowledge sharing culture and training and development of library staff were the needed ingredients to enhance transfer of tacit knowledge at KNLS.

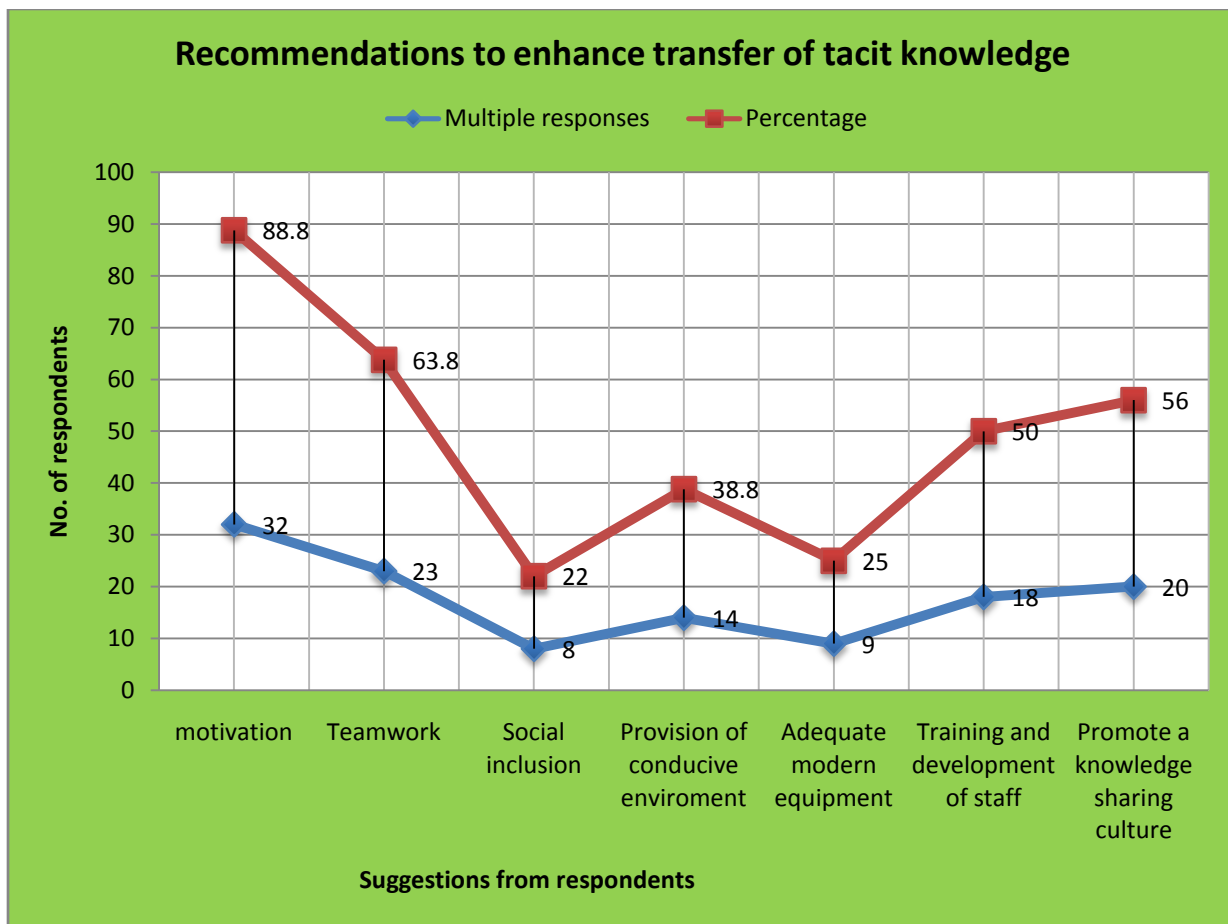


Figure 3: The figure above shows multiple responses on recommendations suggested by respondents to enhance transfer of tacit knowledge.

a. Motivation

Motivation is the key element in transfer of tacit knowledge. Thirty two (92%) respondents suggested that the management should recognize, reward and fully support expertise in various fields in order to facilitate transfer of tacit knowledge. The respondents argued that the success of KNLS depended largely on the motivation of the employees.

The study found out that every respondent had his/her own set of motivations and personal incentives. Some respondents were motivated by recognition while others were motivated by cash incentives. The study established that whatever the motivation, the key to promoting that motivation was through understanding, recognition, rewards and incentives. The respondents argued that employees who meet targets go beyond the call of duty and their efforts should be rewarded. One respondent pointed out that the human resources should be valued above all things to enhance transfer of tacit knowledge, expertise, experiences and provide continuity of the institution. The study noted that motivation of employees would enhance productivity, commitment, reduced employee turnover, results driven employees, loyalty, work place harmony which enables transfer of tacit knowledge.

b. Teamwork

Twenty three (64%) respondents suggested that there should be annual retreats and team building activities in the institution to enhance transfer of tacit knowledge. The respondents insisted that team building activities would build rapport and trust between the staff and management and create lasting relationships that would enhance transfer of tacit knowledge.

c. Adequate modern equipment

Nine (25%) respondents said Information technology and systems would provide effective support in implementing knowledge management. The respondents suggested that the institution should provide access to adequate modern equipment and connectivity

to various KNLS libraries to facilitate a knowledge sharing culture. The respondents further suggested that the visually challenged staff should have access to modern equipments to facilitate sharing and transfer of expertise, know-how and best practices.

d. Social inclusion

Eight (22%) respondents suggested that staff with physiological challenges should be given opportunity to display their skills and expertise like everyone else. They suggested that they should be provided with a conducive environment, trained, motivated, provided with the necessary equipment to enhance transfer of their expertise, know-how and skills.

e. Training and development

Eighteen (50%) respondents suggested that there should be equal opportunities for training of all staff. They pointed out that training and development of staff should be carried out on an annual basis as per job specifications and staff interests. The study found out that the key factor in employee motivation and retention was the opportunity given to staff to develop and grow in job and career enhancing skills through training.

f. Promote a knowledge sharing culture

Twenty (56%) respondents suggested that knowledge sharing culture should be embraced and emphasized by the institution. They stated that this could allow creation, acquisition, sharing, transfer and use of knowledge to improve operations as well as innovate current services. The respondents pointed out that knowledge sharing culture would provide competitive advantage over information brokerage firms, cybercafés and

private libraries. One respondent added that “*expertise and know-how grows more with sharing of ideas both vertically and horizontally in the organizational structure*”. Another respondent pointed out that a knowledge sharing culture would be possible through lean organizational structures free from nepotism and bureaucratic practices.

4.6.2 Tacit knowledge and library operations.

The study sought to find out if enhancing transfer of tacit knowledge could improve library operation and how it could be used.

Tacit knowledge is automatic knowledge i.e. no time is required to retrieve it. The philosopher Polanyi (1967) described tacit knowledge as “*knowing more than we can tell*”. His description tells us that we know more than what we can describe using text, numerals or symbols. His description analyses that tacit knowledge is in one’s belief system, perceptions, habits, insights, values and experiences.

All the respondents pointed out that tacit knowledge which consists of skills, expertise, experiences and best practices could improve library operations. The respondents stated that it could be used to improve library operations in the following ways;

- Tacit knowledge is useful in answering users’ queries on where to locate documents, how to use given information materials and how to carry out a research study. One respondents pointed out that for a librarian to direct a user to where the item is, or guide a user on how to carry out a research, the librarian should have knowledge of the library collection, knowledge of the users as well as searching and retrieval skills.

Another respondent said *“to answers reference queries, I put the user through an interview session to know what the user wants. After carrying out the interview, I analyze and interpret user query then I use my own skills and expertise in searching for the answer to fulfill the user need”*

- Through sharing of ideas, tacit knowledge aided in efficient and effective delivery of library services to the users. The respondents stated that services e.g. updating and manipulating users’ records, searching and retrieval services, information literacy services, abstracting and indexing services, document management services, processing and organization of information resources in the library, binding and repair of information resources, customer care services and marketing of library services needed quite a lot of experiences, skills and expertise.
- Tacit knowledge was enormously required in decision making, setting up of new libraries, managing of employees and information resources, providing leadership to departmental teams, carrying out projects and in collaboration with other partners in carrying out research.

The senior members of management interviewed pointed out that tacit knowledge could be used to improve as well as enhance library processes, operations and services. They pointed out that staff who were experts in given library fields were always given the time and priority to train others. They pointed out that the growth and innovations at KNLS were through combined efforts of the library staff and the management.

4.6.3 Enhancing transfer of know-how and expertise to a fellow colleague

The study wanted to find out how to enhance transfer of know-how and expertise to a fellow colleague in the work place. Twenty five (69%) respondents said tacit knowledge transfer to fellow colleagues could be enhanced through brainstorming, debriefing, job rotation and collaboration between various sections, departments and libraries. Eleven (31%) respondents added that the use of intranet as an effective knowledge management and sharing tool would enhance transfer of tacit knowledge.

4.6.4 Enhancing transfer of know-how and expertise to newly employed staff

The study wanted to find out how to enhance transfer of know-how and expertise to a newly employed staff. Thirty one (86%) respondents said transfer of know-how and expertise could be enhanced through staff orientation, on-job training, intranet, e-mails and mentoring of new staff. Five (14%) respondents pointed out that the newly employed were young and self-independent thus the use of social media, intranet, e-mails and practical demonstrations would enhance transfer of tacit knowledge.

4.6.5 Enhancing transfer of know-how and expertise to interns.

The study wanted to find out how to enhance transfer of know-how and expertise to interns. The respondents said the interns should be given a longer period of internship. Some of the respondents argued that the period for internship was short hence the interns went back to their institutions of learning when '*half baked*'.

4.6.6 Enhancing transfer of know-how and expertise in a multi-generational work place

The study sought to find out how to enhance transfer of know-how and expertise in a multi-generational work place. All the respondents said the older generation were loaded with wealth of accumulated knowledge and wisdom. They insisted that the younger ones should be eager to access the knowledge and wisdom possessed by the older generation. The respondents pointed out that teamwork could enhance transfer of tacit knowledge. The study established that due to digital divide and differences in learning capabilities, both generations needed time to understand one another and form a relationship to aid transfer of know-how and expertise.

The key informants said that transfer of know-how and expertise at KNLS could be enhanced through coaching, mentoring and teamwork. They pointed out that with the dynamic changes in the knowledge world; there was need for KNLS to embrace knowledge management to manage both the explicit and tacit knowledge in order to catch up with the fast trends of the knowledge-economy.

4.6.7 Tacit knowledge performance, attainment of innovation and competitive advantage

The study sought to find out if enhancing transfer of tacit knowledge could improve library performance, attain innovation and provide competitive advantage.

a) Performance

All the respondents stated that enhancing transfer of tacit knowledge could improve library performance.

One respondent said *“Expertise and know-how are in the habits and mind of an individual, but if this knowledge is transferred to another person, his/her performance will improve since the recipient of the knowledge will add his/her own skills and knowledge to come out with a new way of performing a given task”*.

Another respondent narrated that persons had different talents and skills and it was only through sharing that another person would know, receive and use the knowledge to get better performance by the end of the day.

b) Innovation

All the respondents said tacit knowledge could bring about innovation of library services and products. One respondent narrated that through interactions and exchange of ideas, staff could come up with new ways of disseminating information, solving problems and fast decision making. Another respondent pointed out that innovation was done at KNLS in daily basis through discussions in staff meetings where the staff and the management came up with new ideas and techniques on how to perform certain tasks. Another respondent pointed out that after working with KNLS for over thirty years, it was sharing, exchange of ideas, cooperation among staff and collaborating with other libraries that has brought about continuous innovation of KNLS products and services.

c) Competitive advantage

Twenty three (64%) respondents pointed out that transfer of tacit knowledge could provide competitive advantage over private libraries and other information centers.

One respondent said *“we have high quality talents and expertise in the library field and other information institutions as well as school libraries, academic libraries look up to us to provide guidance”*

Thirteen (36%) respondents said that KNLS was not in competition with other libraries or information centers. The respondents pointed out that KNLS was playing its role of developing and promoting reading culture through provision of guidance, and information services as per the Act of Parliament of 1965.

Another respondent said *“I think KNLS should not compete with other institutions because it is a government project”*.

Another respondent pointed out that KNLS should provide education, training, consultancy, provide access to information and knowledge, expertise and know-how to other libraries whether academic or private to fulfill its mandate.

The members of management interviewed stated that although KNLS was a government institution, there was need to improve the libraries to catch up with other information and knowledge dissemination centers worldwide. They pointed out that the growth of private libraries, cybercafés and information bureaus and now knowledge centers has brought about competition for clientele and information professionals.

4.7 Summary

This chapter has presented, analyzed and provided interpretation of the research findings. It is apparent from the research findings that KNLS had not embraced knowledge management to manage its intellectual capital. KNLS with the vision statement that reads “*A national center of excellence that preserves and disseminates information for knowledge and creativity*” should be in the fore front to embrace knowledge management to manage the intellectual assets of its human resource. KNLS should create a conducive environment that enables its human resource to share and transfer their tacit knowledge.

The study established that sixty one percent of the library staff participated inadvertently due to lack of knowledge management awareness and lack of a knowledge management policy to guide in knowledge management activities. The study further established that KNLS had good communication channels used to transmit information and knowledge down and up the organizational ladder but the channels were not sufficient enough to enhance transfer of tacit knowledge, thus created a knowledge gap.

The study found out that KNLS library staff faced various challenges in transmission and reception of tacit knowledge. This was due to lack of motivation, lack of trusts, knowledge hoarding, attitudinal barriers and lack of a knowledge management policy to guide in formulation and implementation of knowledge management practices among many other challenges (see table 3). The study found out that KNLS carried out performance appraisal of its staff annually but had never carried out a knowledge audit,

to determine its intellectual capital. This intellectual capital provides a competitive advantage and assures continuity in the organization.

The respondents have made recommendations which should be addressed to ensure enhanced transfer of expertise and know-how to the younger generations by the older generation. The study established that the older generations were full to the brim with wealth of accumulated knowledge, wisdom, experiences in various fields. These human resources acted as gatekeepers and organizational memories. The institution should ensure that as an employee leaves to search for greener pastures or retires from active employment, there is always someone to replace the leaving employee with all the required skills, talents and expertise in handling the same tasks.

Tacit knowledge reflects on how work is really done in an organization. It represents the unique value added by people who generate it. This knowledge emerges from skills and experiences, reflecting the history and circumstances of the institution. Tacit knowledge is developed, shared, transferred and used when solving real problems in pursuit of real goals. Tacit knowledge reflects on the reality of how work is really done.

CHAPTER FIVE

SUMMARY OF THE MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the research findings, conclusions and recommendations of the study. The chapter also provides suggestions for further research.

5.2 Summary of the findings

The summary of the findings are presented according to the research questions as outlined below:

5.2.1 Research question one: What knowledge management practices are in use at KNLS

The following knowledge management practices were identified:

a) Knowledge creation

The study found out that knowledge creation was the outcome of interactive process between the staff and management. Knowledge creation as per the study findings was created on a daily basis through group discussions, staff meetings, brainstorming, on-job training, in-house trainings and practical demonstrations. The study established that new

knowledge acted as a key resource in library operations and was needed to aid in catching up with changing user needs and new ICT technologies.

b) Knowledge capturing

The study found out that eighteen (50%) respondents stated that knowledge was captured through presentation of research papers, appraising of staff expertise and fourteen (39%) respondents were not aware of it, while four (11%) respondents said there were no activities on knowledge capturing. The study findings indicated that knowledge capturing activity was carried out informally and some of the staff were not aware of its existence.

c) Knowledge acquisition

The study established that the KNLS library staff acquired knowledge through attending conferences, seminars, workshops, in-house/outside trainings, research and collaboration with other institutions.

d) Knowledge sharing and transfer

The study established that KNLS had staff with wealth of experience and expertise in the field of librarianship. The respondents as per their characteristics were well trained and over half of the respondents had worked for over fourteen years. The respondents acted as repositories of knowledge. The study findings indicated that knowledge sharing at KNLS was semi-formal. The staff shared their knowledge during staff meetings, tea & lunch breaks, research presentation, practical demonstrations, brainstorming sessions, via KNLS intranet, e-mails and social media. The study further indicated that the staff

transferred their tacit knowledge during the sharing process consciously and unconsciously.

e) Partnership with other libraries

The study findings indicated that KNLS collaborated with other libraries in sharing knowledge, through carrying out research and in acquisition of scholarly information resources to develop and improve library services.

5.2.2 Research Question two: what policies govern knowledge management practices at KNLS?

The study established that KNLS did not have a written approved policy to govern knowledge management activities. The study findings indicated that knowledge management practices were informal.

a) Harnessing knowledge at KNLS

The study findings indicated that KNLS harnessed its knowledge in various ways:

- They used intranet as a knowledge management and sharing tool.
- They used formal and informal communication channels to share, transfer and use knowledge

b) Participation of library staff in knowledge management practices

The study findings indicated that knowledge management at KNLS was a new field and sixty one percent of KNLS library staff participated intuitively in knowledge management activities.

c) Skills and expertise of library staff in knowledge management

The study findings indicated that 40% library staff did not have the required skills and expertise to participate effectively in knowledge management activities.

d) Initiatives taken by KNLS to facilitate tacit knowledge transfer

KNLS management had taken initiatives to facilitate knowledge sharing and transfer activities through job rotations, in-house trainings, staff meetings, use of intranet, e-mails, and workshops. The KNLS management had taken a further initiative to sponsor some of the library staff on knowledge management courses.

5.2.3 Research Question three: what kinds of tacit knowledge are found among staff at KNLS?

KNLS library staff had both individual and collective tacit knowledge. The individual tacit knowledge consisted of life time accumulation of skills, wisdom, experiences, expertise and best practices. The collective tacit knowledge was embedded in daily practices, routines, organizational culture and in their informal groupings.

The findings indicated that twenty six (72%) respondents said tacit knowledge although being highly context specific and had personal quality, was transferrable whereas ten (28%) respondents said tacit knowledge was hard to transfer. The findings indicated that practical demonstrations, face to face interactive communication channels and patience were the needed ingredients in transfer of tacit knowledge.

5.2.4 Research Question four: What communication channels are used to transfer tacit knowledge at KNLS?

The research findings indicated that the major communication channels used to transfer tacit knowledge at KNLS were:

- Practical demonstration
- Brainstorming
- Staff meeting/presentations
- Workshops, seminars & conferences
- KNLS intranet
- Group discussions

Most respondents preferred face to face interactive communication channels to transfer tacit knowledge. The findings indicated that brainstorming was the best communication channel chosen by respondents for use in a multi-generational workplace to transfer tacit knowledge, followed by practical demonstration.

5.2.5 Research question five: what challenges are faced by library employees when transferring tacit knowledge at KNLS?

The study established the following major challenges that hindered transfer of tacit knowledge at KNLS:

- Lack of motivation
- Lack of knowledge management awareness, strategies and policies
- Knowledge hoarding
- Lack of inadequate training
- Attitudinal barriers
- Age gap
- Cultural barriers

5.2.6 Research question six: how can transfer of tacit knowledge be enhanced?

The study findings indicated that transfer of tacit knowledge could be enhanced in the following ways as per the respondents' responses:

- Motivation of staff
- Training and development of staff
- Provision of adequate modern equipment
- Enhance social inclusiveness
- Promote a knowledge sharing culture
- Enhance teamwork

5.3 Conclusion

The study concluded that KNLS had a competitive edge in terms of intellectual capital. The study established that more than half of the respondents had served for a period of more than fourteen years in the institution and had masters and undergraduate degrees respectively. These findings indicated that the human resource were well trained and had accumulated skills, talents, experiences and expertise in their fields of specialization. Most respondents acted as gate-keepers in their various

work places. The study concluded that KNLS should tap this accumulated wealth of knowledge, expertise and experiences and use it to improve its library operations, innovate existing services and attain a competitive edge.

The study concluded that although KNLS had not fully embraced knowledge management and did not have a written approved knowledge management policy in place, knowledge management was practiced informally. The study established that KNLS staff had both the individual and collective tacit knowledge. These kinds of tacit knowledge enabled them to cooperate and collaborate in various activities in the library. The study further established that some of the respondents were not aware of the knowledge they possessed or how it could be valuable to others.

The study concluded that communication channels used by respondents to transfer tacit knowledge were semi-formal. The responses indicated that the preferred communication channels for transfer of tacit knowledge were informal. The study concluded that although library staff faced quite a lot of challenges in transferring tacit knowledge, the most overall ones were: lack of motivation, lack of trust, knowledge hoarding, lack of knowledge sharing culture, lack of training, lack of conducive environment and policies to guide in knowledge management activities. The study through the respondents' suggestions concluded that motivation; teamwork, social inclusiveness, training and development of staff, provision of adequate modern equipments and provision of a knowledge sharing culture in the institution would enhance transfer of tacit knowledge.

The study concludes that intellectual capital is a crucial element because it fosters innovation, continuous improvement in library operations and services. The study concludes that KNLS should take organizational tacit knowledge sharing and employees' motivational factors into account so that they do not miss out on huge opportunities.

5.4 Recommendations

The study findings revealed that transfer of tacit knowledge at KNLS had its own challenges and the study makes the following recommendations to enhance transfer of tacit knowledge.

5.4.1 Establishment of a knowledge management unit

The study recommends that KNLS should come up with a knowledge management unit to manage and facilitate the flow of knowledge in the organization. The unit headed by a chief knowledge officer (CKO) will guide the organization in knowledge management activities.

5.4.2 Formulation of a knowledge management policy

The study recommends that KNLS should formulate a knowledge management policy to guide the organization in knowledge creation, acquisition, capturing, storing, sharing, transfer and use.

5.4.3 Motivation

Motivation of staff is a key ingredient to knowledge sharing and transfer. Most organizations spend a lot of money to replace or employ new staff than to keep the

existing staff. Staff needs to feel needed, respected and keeping them happy means they will stay much longer in the organization. An organization might run through tough times but it should keep motivating its staff. Incentives, rewards and recognition are factors that give employees an incentive to work resulting in job satisfaction. Once job satisfaction is increased, there is efficiency and effectiveness in delivery of services. The study recommends that KNLS should recognize talent, expertise, long-term services, skills, experiences, best practices and reward them accordingly.

5.4.4 Provision of a knowledge sharing culture

The study recommends that KNLS should embrace knowledge management and create a knowledge sharing culture to facilitate sharing and transfer of tacit knowledge. KNLS organizational structure should allow development and enhancement of communities of practice to encourage knowledge sharing, transfer and capture. The organizational structure should be open and should promote trust-based communication between all members irrespective of status.

5.4.5 Carry out a knowledge management audit

The study recommends that KNLS management should carry out a knowledge audit in the institution. To audit is to evaluate a person, a system, a process or a business by an independent third party. It is an investigation to identify the organization knowledge-based assets, knowledge needs, interconnectivity with existing systems and development of strategies to manage the knowledge.

5.4.6 Training and development of staff

The study recommends that KNLS enhance training of its human resource in knowledge management and knowledge management activities to promote knowledge sharing and transfer of tacit knowledge both within each library and across the KNLS libraries. The effectiveness and success of any organization depends on the human resource. Training and development of staff increases productivity, reduces waste, develops new skills, knowledge, understanding and attitudes of the staff. Training enhances use of new technologies, machines, enhances implementation of policies and strategies. It improves man-power development and ensure survival. Training provides growth and continuity of the institution.

5.4.7 Create a teamwork culture

The study recommends that KNLS should facilitate creation of a teamwork culture within the institution. Teamwork is the process of working collaboratively with a group of people in order to achieve a goal. KNLS should put in place team building activities to create work culture that values collaboration. Team building activities will help the organization and the groups to improve their unity of purpose, identify, analyze and solve their own problems as groups. Through teamwork, staff or members of the groups will be encouraged to listen attentively, express their ideas, feelings, while maintaining focus on the tasks to be accomplished. Teamwork fosters relationships, trust and promotes knowledge sharing and transfer of expertise, experiences and skills.

The study recommends that the wealth of knowledge that is in older employees in the library should be tapped by the younger generation and used to get competitive edge in the current changing environment. The study also recommends that the KNLS

management should capture and harness the wealth, wisdom, expertise and experiences embedded in the heads of older employees before they leave the organization. The study further recommends KNLS to use various methods or ways to access this knowledge e.g. through brainstorming, open discussions, provision of fertile ground for creativity, sharing of ideas, organizing workshops, conferences, mentoring of new employees, web archiving and collectively addressing problems and finding solutions.

5.5 Proposed Model to Enhance Transfer of Tacit Knowledge at Kenya National Library Services

The study proposes a model that could be used to enhance transfer of tacit knowledge at Kenya National Library Services. The model presents five stages that would ensure smooth transfer of tacit knowledge.

TACIT KNOWLEDGE TRANSFER MODEL

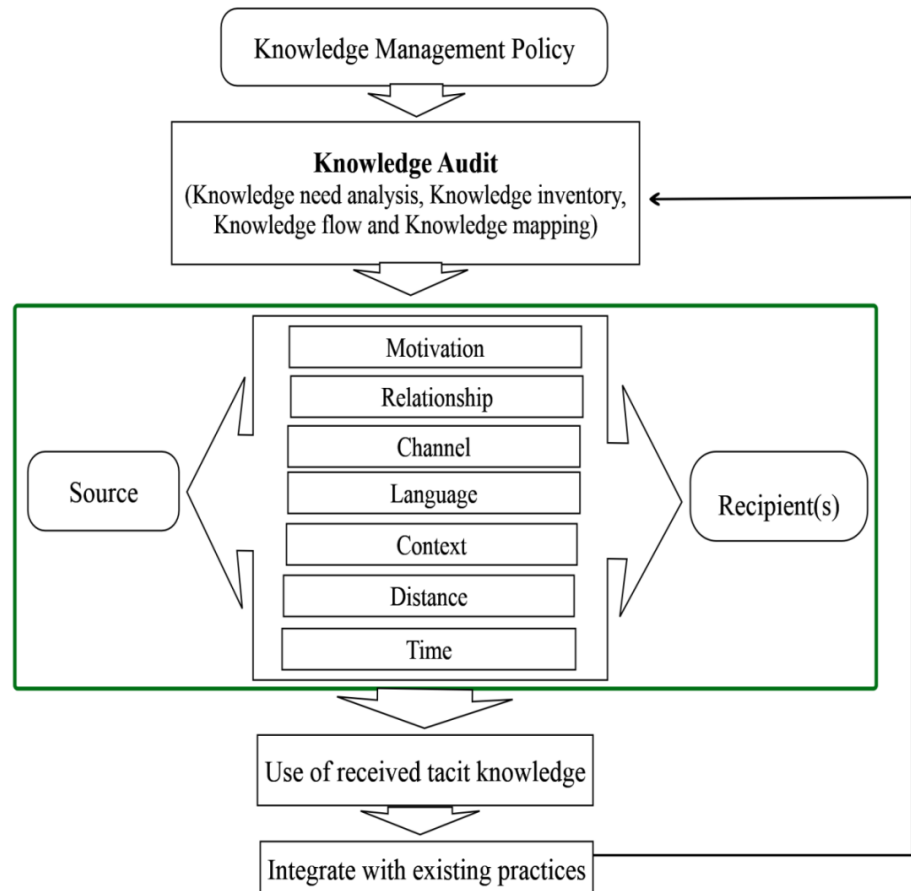


Figure 4: Presents a proposed model to enhance transfer of tacit knowledge at Kenya National Library Services

Step One: Knowledge management policy (KMP).

Intellectual capital is the basic foundation for the creation and protection of organization's value. A knowledge management policy will foster knowledge management initiatives, procedures and tools that will allow KNLS to truly and effectively exploit intellectual capital. The KMP will foster sharing and dissemination of KNLS's existing knowledge, assist in creation of robust communities able to

survive organizational change so as to enhance operational efficiency through proper use of intellectual capital.

Knowledge management comprises of three components as follows; (i) people who create, share and use knowledge as part of their daily work; (ii) processes which include methods to acquire, create, organize, share and transfer knowledge; (iii) and technology, these are mechanisms to store and provide access to data, information and knowledge. Knowledge management policy will integrate all the three components to create harmony and act as a road map to implementation of knowledge management and knowledge management practices.

Step two: Knowledge audit (KA)

Knowledge audit is a view of the organizations' knowledge assets and associated knowledge management systems. Knowledge audit will offer a detailed examination, review, assessment and evaluation of KNLS's knowledge abilities, its existing knowledge assets and resources and of its knowledge management activities. Knowledge audit will help to determine what knowledge is being managed and how well it is being managed.

Henczel (2000) states that knowledge audit examine where knowledge is being produced and where it is needed as an input task or activity. She further points out that KA identifies where there is a need for internal transfer of knowledge and knowledge sharing activities. Henczel further pointed out that knowledge audit has two main objectives. The first being to identify the people, issues that impact on knowledge creation, transfer and sharing. She further pointed out that the second

objective of knowledge audit is to identify which knowledge can be captured, where it is needed and can be reused, and to determine the most efficient and effective methods to store, facilitate access to and transfer of the knowledge.

Knowledge audit has four components namely:

a) Knowledge needs analysis

This component identifies exactly what knowledge KNLS library staff possesses and what knowledge they would require in future in order to meet their objectives and goals. The knowledge needs analysis component will assist KNLS to develop future strategies.. It will also measure the library staff skills, competency enhancement needs and opportunities for training and development.

b) Knowledge inventory

This component is a knowledge stock taking to identify and locate knowledge assets and resources throughout the entire KNLS organization. This may involve counting, indexing and categorizing of the organization tacit and explicit knowledge. It involves a series of surveys and interviews to find out tacit and explicit knowledge that the organization holds. This component will assist KNLS to be able to identify knowledge gaps as well as areas of unnecessary duplication.

c) Knowledge flow

This component looks at the flow of knowledge in the institution. It examines attitudes, habits, behaviours, skills in knowledge sharing, use and dissemination. This component will examine how the library staff in the institution go about their daily work activities and how they seek, share, transfer and use their knowledge. This component further allows the institution to identify knowledge gaps and areas of

duplication. It will generally highlight areas of good practice that can be built on as well as barriers to knowledge flow and effective use.

d) Knowledge mapping

Knowledge map can be defined as an ongoing joint quest to help discover the constraints, assumptions, allocation, ownership, value and use of knowledge assets, artifacts, people and their expertise. It is a component that uncovers blocks to knowledge creation, and finds opportunities to leverage existing knowledge (Business dictionary.com, 2013). This component is an outcome of synthesis, portrays, sources, flows, constraints and stopping points of knowledge in the institution. The map reveals the relationship among knowledge structures and each link pointing to the related knowledge. It will show what knowledge exists at KNLS and where it can be found. It will show how knowledge moves around the organization from where it is to where it is needed. It identifies constraints to the flow of knowledge and highlight opportunities to leverage existing knowledge. It discovers effective and emergent communities of practice where learning is happening.

Step three: Tacit knowledge transfer process

This is the stage where tacit knowledge is shared and transferred between the source and the recipient(s).

a) Source

This is the provider or presenter of the know-how, skills, experiences and expertise. The source in the proposed tacit knowledge transfer model shown above also acts as the recipient in the communication process.

b) Recipient(s)

The recipient in the proposed tacit knowledge transfer model can also act as the source in the communication process.

c) Motivation

This is the ingredient that enables sharing and transfer of tacit knowledge. Motivated employees go to higher level to ensure that they meet the targeted goals at all times. They always put the company first before their interests. The source needs motivation to share and transfer his or her expertise, know-how, experiences and skills. The source needs recognition, rewards and incentive for a work well done. The recipient on the other hand requires motivation to enable him or her to absorb and retain the knowledge. Unmotivated recipient tends to be busy making unnecessary noise in the background as well as causing disruptions. Recipients who are not motivated resist change and may use all means to resist absorption of expertise and know-how.

d) Relationship

The source and the recipient should have good relationships in order to facilitate transfer of tacit knowledge. A relationship between the two needs to be intact and build in trust to ensure none of them has ill feelings of the other one.

e) Language

The language used by the source when transferring his/her expertise, know-how, skills, ideas and experiences should be understood by the recipient(s). The transfer process significantly depends on the communication abilities of both the sender and the receiver. They both should have a common language to make transmission and absorption of tacit knowledge easier and faster.

f) Context

Context is a framework that embeds behavioral and structural aspects of an organization. This includes organizational knowledge sharing culture; organizational structures and climate.

g) Distance

Distance between the source and the receiver is a significant factor in transfer of tacit knowledge. There should be physical interactions such as face to face contact of the participants to facilitate tacit knowledge transfer.

h) Time

Time is a scarce resource. Transference of tacit knowledge is time consuming; therefore quality time for interaction should be allocated to facilitate transfer of tacit knowledge.

Step four: Use of the received knowledge

We only know that tacit knowledge has been transferred when the recipient uses the knowledge.

Step five: Integration of the new knowledge with existing practices

The expertise, skills and know-how can be embedded into daily routines, procedures and can be used to improve performance, innovate existing services and enhance competitive edge.

Loop

After integration of new knowledge with existing practices, the loop goes up to the audit level. The new knowledge integrated with existing practices should be audited.

5.6 Suggestions For Further Research

This study proposes the following areas for further research

- Impact of motivation on tacit knowledge transfer in government libraries in Kenya
- Knowledge sharing and achievement of vision 2030 in Kenya

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APPENDICES
APPENDIX : INTRODUCTION LETTER

Christine Cherono Tuitoek
P.O.BOX 21794-00505
Nairobi
Kenya

22 June 2012

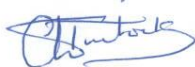
Dear Respondent,

RE: REQUEST FOR INTERVIEW

I am a Second year master's student at Moi University Nairobi Campus, pursuing Master of Philosophy Degree in Library and Information Studies. I am currently carrying out a research thesis on 'Transfer of tacit knowledge among staff at Kenya National Library Services'. I therefore kindly request you to give me an appointment date and time to discuss about the above subject; the interview which will be conducted will take not more than 30 minutes of your time. The information that you will provide will be treated with ultimate confidentiality and will solely be used for the purpose of this research.

Thanking you in advance

Yours faithfully,



Christine Cherono Tuitoek.

Mobile No.: 0722386969

Email address: tuitoekcc@gmail.com

**APPENDIX II: INTERVIEW SCHEDULE A: SENIOR MANAGEMENT
(INFORMANTS)**

1. Background information

- Department:.....
- Section:
- Designation:
- Academic Qualification:
- Gender:.....
- Age:..... Years of service:

1. Knowledge management practices

- Does KNLS have any knowledge management activities? If yes, name them. If no why?
- Does KNLS have a knowledge management policy?
- How do you harness knowledge at KNLS?
- To what degree are the library staffs involved in knowledge management activities.
- Do the library staff have the required skills and expertise to participate effectively in knowledge management activities? If no, then what initiative has been taken to ensure that library staffs participate effectively in knowledge management activities?
- What initiatives have been taken to facilitate tacit knowledge transfer in the institution?

2. Kinds of tacit knowledge at KNLS

- What is tacit knowledge
- What kinds of tacit knowledge are found among library staff at KNLS?
- Is tacit knowledge transferable?

3. Communication channel used in transfer of tacit knowledge

- What communication channels are used by library staff in transferring tacit knowledge at KNLS?
- Are the communication channels for transferring tacit knowledge formal or informal?
- Are the communication channels for transferring tacit knowledge effective?
- Which is the best communication channel to transfer tacit knowledge in a multigenerational work place?

4. Challenges encountered in transfer tacit knowledge at KNLS

- What challenges do library staff face when transferring tacit knowledge to
 - a) Colleagues?
 - b) New employees?
 - c) Interns?
- In a multigenerational work place, what challenges and experiences do staff encountered in transfer of tacit knowledge?
- What initiatives has KNLS put in place to ensure efficient and effective transfer of tacit knowledge?

5. Enhancing transfer of tacit knowledge at KNLS

- Do you think enhancing transfer of tacit knowledge at KNLS will improve library operations?
- What do you think should be done by KNLS to enhance transfer of know-how /expertise to:
 - a) Fellow colleagues in the work place?
 - b) Newly employed staff?
 - c) Interns?
 - d) In a multigenerational work place
- Do you think enhancing transfer of tacit knowledge at KNLS will improve library performance; attainment of innovation and provide a competitive advantage?

APPENDIX III: INTERVIEW SCHEDULE B: LIBRARY STAFF

1. Background information

- Department:
- Section:
- Designation:.....
- Academic Qualification:.....
- Gender:
- Age:
- Years of service:.....

2. Knowledge management practices

- Does KNLS have knowledge management practices?
- Are the knowledge management practices formal or informal?
- Are there policies that govern knowledge management practices at KNLS?
- How does KNLS harness its knowledge?

3. Kinds of tacit knowledge at KNLS

- What is tacit knowledge?
- What kinds of tacit knowledge are found among library staff at KNLS?
- Is tacit knowledge that you have transferrable?

4. Communication channels used in transfer of tacit knowledge

- Which communication channels are used in transfer tacit knowledge in the library?
- Are the communication channels formal or informal?
- Are the communication channels for transferring tacit knowledge effective?
- Which communication channels would you prefer to use?
- What is the best communication channel to transfer tacit knowledge in a multigenerational work place?
- What considerations should be put in place to ensure proper transfer of tacit knowledge?

5. Challenges in transferring tacit knowledge at KNLS

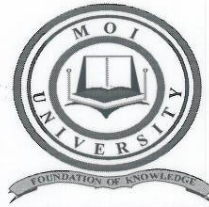
- What challenges do you face when transferring tacit knowledge to
 - a. Colleagues?
 - b. New employees?
 - c. Interns?
- As a source of tacit knowledge, what challenges hinder the transmission of tacit knowledge?

- As a recipient of tacit knowledge, what challenges hinder the reception of tacit knowledge?
- In a multigenerational work place, what challenges and experiences do you encountered in transfer of tacit knowledge?
- What ways have you adopted in order to overcome the transfer and reception challenges?

6. Enhancing transfer of tacit knowledge at KNLS

- What measures should be put in place to ensure smooth transfer of tacit knowledge at KNLS?
- Do you think enhancing transfer of tacit knowledge can improve library operations? If yes, then how can (tacit knowledge) expertise and know-how be used to improve the library operations?
- What do you think should be done to enhance transfer of know-how /expertise to:
 - a) Fellow colleagues in the work place?
 - b) Newly employed staff?
 - c) Interns?
 - d) Multigenerational work place?
- Do you think enhancing transfer of tacit knowledge can improve library performance, attain innovation and provide a competitive advantage?

APPENDIX IV: REQUEST FOR DATA COLLECTION



MOI UNIVERSITY

DEPARTMENT OF LIBRARY, RECORDS MANAGEMENT AND INFORMATION STUDIES

Tel: (053) 43231
 Fax No. (053) 43292
 Telex NO: 35047 MOIVASITY
 E-Mail: hodlis@mu.ac.ke OR deanis@mu.ac.ke

P. O. Box 3900
 Eldoret
 Kenya.

REF: IS/MPHIL/072/010

14th April, 2012

TO WHOM IT MAY CONCERN

RE: CHRISTINE CHERONO TUITOEK (IS/MPHIL/072/010)

The above named is a postgraduate student in the Department of Library, Records Management and Information Studies, School of Information Sciences, Moi University Nairobi Campus pursuing a Master of Philosophy degree in Library and Information Studies. She is carrying out a research thesis entitled *"Transfer of Tacit Knowledge Among Staff At The National Library Service, Nairobi"*.

The purpose of writing is to request you kindly to allow Ms. Tuitoek conduct the research and request your staff to assist her collect the necessary data. The information given will be treated with utmost confidentiality and will be used only for the purpose of writing the research thesis. We look forward to continued support and co-operation.

Any assistance accorded to her will be most appreciated.

Yours sincerely,

Damaris

DR. DAMARIS ODERO
SENIOR LECTURER AND HEAD,
DEPARTMENT OF LIBRARY, RECORDS MANAGEMENT & INFORMATION STUDIES

DO/ik

APPENDIX V: RESEARCH AUTHORIZATION

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349
254-020-310571, 2213123, 2219420
Fax: 254-020-318245, 318249
When replying please quote
secretary@ncst.go.ke

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/012/675**

Date: **13th June 2012**

Christine Cheron Tuitock
Moi University
P.O.Box 3900-30100
Eldoret.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Transfer of Tacit Knowledge among staff at the Kenya Library Service, Nairobi,*" I am pleased to inform you that you have been authorized to undertake research in Nairobi Province for a period ending **31st December, 2012.**

You are advised to report to the **Director, Kenya National Library Services, Nairobi** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR. M. K. RUGUTT, PhD HSC.
DEPUTY COUNCIL SECRETARY

Copy to:

The Director,
Kenya National Library Services
Nairobi.

APPENDIX VI: RESEARCH PERMIT

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

GPK60553mt10/2011



REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

(CONDITIONS - see back page)

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THIS IS TO CERTIFY THAT
Prof./Dr./Mr./Mrs./Miss/Institution
Christine Cherono Tiptok
 of (Address) **Moi University**
P.O. Box 3900-30100, Eldoret
has been permitted to conduct research in

Location
District
Nairobi Province

on the topic: Transfer of tacit knowledge among
staff at the Kenya Library Service, Nairobi

Research Permit No: NCST/RCD/14/012/675

Date of issue: 23rd June, 2012

Fee received: KSH. 1,000

Applicant's Signature

Secretary
National Council for
Science & Technology

for a period ending: 31st December 2012

APPENDIX VII: REQUEST FOR RESEARCH AUTHORIZATION

Christine Cherono Tuitoek
P. Box 21794-00505
Nairobi
Kenya

The Director
Kenya National Library Services
P.O.Box 30573
Nairobi

22nd June 2012

Dear Sir,

RE: REQUEST FOR RESEARCH AUTHORIZATION

I am a second year Master's student at Moi University Nairobi Campus, pursuing Master of Philosophy Degree in Library and Information Studies. I am currently carrying out a research thesis on '*Transfer of tacit knowledge among staff at Kenya National Library Services*'.

I therefore kindly request for authorization and introduction to enable me collect data. The information that will be provided by your institution will be treated with ultimate confidentiality and will solely be used for the purpose of this research.

Thanking you in advance

Yours faithfully,



Christine Cherono Tuitoek

Mobile No. 0722386969

Email address: tuitoekcc@gmail.com

APPENDIX VIII: AUTHORITY TO CONDUCT INTERVIEW

KNLS/LIB/22/178

22nd June 2012

M E M O

FORM : DIRECTOR

**TO : HOD NAL, CDBD, NLD, BURUBURU LIBRARY, INTERNAL
AUDIT, HR, PLANNING&RESEARCH AND CORPORATE
COMMUNICATION,**

SUBJECT : AUTHORITY TO CONDUCT INTERVIEW - CHRISTINE C. TUITOEK

Kindly, I wish to inform you that the above named person is a student of Moi University and has been authorized to conduct and administer her research within your Department and therefore you are requested to give her all the necessary assistance that she might need from that end.

Her research topic is "Transfer of tacit knowledge among staff at Kenya National Library Service"

Thanks and God bless


CYRUS NDOGO
For : DIRECTOR

CC : Christine C. Tuitoek

APPENDIX IX: TIME FRAMEWORK

	Activity	Time frame
1	Proposal writing	June-Nov. 2011
2	Proposal presentation and approval	November 2011
3	Corrections	January-February 2012
4	Submission of research proposal	March 2012
5	Application for permit and other authorizations	May 2012
6	Interviews(Data collection)	June-October 2012
7	Data analysis	November 2012-February 2013
8	Report writing	March-April 2013
9	Corrections	May-July 2013
10	Miscellaneous and binding	August 2013
11	Submission	September 2013

Table 6: The table above shows the research time frame

APPENDIX X: RESEARCH BUDGET

	ITEM	QUANTITY	Cost @ (ksh.)	Total cost (Ksh.)
1	Laptop	1	50,000	50,000
2	Printer	1	12,000	12,000
3	Paper (ream)	8	500	4,000
4	Stationery		5,500	5,500
5	Transport			20,000
6	Airtime	8	500	4,000
7	Miscellaneous			25,000
	TOTAL			120,500

Table 7: The table above shows Research Budget