

**EFFICIENCY OF KENYA LIBRARIES INFORMATION SERVICES CONSORTIUM
IN PROVISION OF E-RESOURCES IN ACADEMIC LIBRARIES: CASE OF
LAIKIPIA UNIVERSITY LIBRARY**

NJUGUNA ANDREW KIMANGA

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of Masters in Library and Information Science in the Department of Library and
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DECLARATION

I confirm that this research project is my original work and has not been presented in any other university/institution for certification. The project has been complemented by referenced works duly acknowledged. Where text, data, graphics, pictures or tables have been borrowed from other works- including the internet, the sources are specifically accredited through referencing in accordance with anti-plagiarism regulations.

Signature:.....

Date:.....

Name: Njuguna Andrew Kimanga

Registration number: E65/OL/NKU/24159/2014

Department: Department of Library & Information Sciences

Supervisors' declaration: I confirm that the work reported in this project was carried out by the candidate under my supervision as University supervisor.

Signature:.....

Date:.....

Name: Dr. Peter G. Mwathi

Department: Department of Library & Information Sciences

University: Kenyatta University

DEDICATION

This work is dedicated to my entire Kimanga family for their patience and support during the entire period of intensive learning, proposal and project writing.

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Glory and honor goes to the Almighty God for His protection and care.

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ABBREVIATIONS AND ACRONYMS

AHITI	Animal Husbandry and Industry
BOAI:	Budapest Open Access Initiative Training Institute ()
CARL:	Colorado's Alliance of Research Libraries
CERT:	Computer Emergency Response Team
CALICO:	Cape Libraries Cooperatives
COC:	Consortium of Consortia
COTUL	Consortium for Tanzanian University and Research Libraries
CUUL	Consortium of Ugandan University Libraries
EALA	East African Library Association
EIFL:	Electronic Information for Libraries
GALILEO:	Georgia Library Learning Online
ICOLC:	International Coalition of Library Consortia
ICT:	Information Communication Technology
IFLA:	International Federation of Library Associations and Institutions
IL	Information Literacy
ILL:	Inter-Library Lending
INASP:	International Networks for the Availability of Scientific Publications
IR:	Institutional Repositories
KENET:	Kenya Education Network
KLA:	Kenya Library Association
KLISC:	Kenya Libraries Information Services Consortium
LC:	Library of Congress
LSFTC	Large-scale Farmers training college
NACOSTI:	National Commission for Science Technology and Innovation

NRSN:	National Resource Sharing Network
OA	Open Access
OPAC:	Online Public Access Catalogue
OSF	Open Society Foundations
OSI:	Open Society Institute
SABINET:	South African Bibliographic and Information Network
SPSS:	Statistical Package for Social Sciences
WC:	World Cat
WIFI	Wireless Fidelity

ABSTRACT

Consortium building by libraries underpins their existence in the current world of information Communication and Technology (ICT). The study was conducted to evaluate the efficiency of Kenya Libraries Information Services Consortium (KLISC) in provision of electronic resources in Laikipia University Library in Laikipia County. The study set out to ascertain adequacy of e-resources training and marketing approaches by the consortium as well as identify challenges faced while using the resources. The study was inspired by findings from diverse parts of the world that indicated low uptake and inadequate utilization of electronic resources purchased by libraries. This study was informed by National Resource Sharing Network model which guided the development of National Resource sharing Network by the Indian Government. A case study method was employed and the researcher interviewed 23 library staff including the University Librarian and the structured questionnaires were administered to 237 post-graduate students in the University. The pilot study was carried out in Egerton University and comprised 4 library staff and 10 post-graduate students as respondents. The analysis of data collected was done using the Statistical Package for Social Sciences (SPSS) version 22 for Windows and presented in form of frequency distribution tables, pie charts and percentages. The research findings established that Laikipia University Library faces challenges in efficient access and utilization of e-resources by both staff and library users and there was a direct relationship between lack of adequate training, promotion of e-resources and user support from the consortium. The researcher recommended enhancement of modern technology to member libraries, online training, and establishment of real time help link from KLISC and policy creation regarding access and utilization of e-resources from the consortium.

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

This chapter introduces the study and covers the background to the study, statement of the problem, purpose, objectives, research questions, significance, limitations and delimitations of the study. It also entails assumptions of the study, theoretical framework by Bibhuti Bhusan Sahoo on National Resource Sharing Network in India, conceptual framework acronyms and abbreviations as well as operational definitions of terms as used by the researcher.

1.2 Background to the Study

The advancement of Information Communication Technology (ICT) has made a remarkable development in almost all walks of life. It has created enormous paradigm shift on the overall library operations. The aspect of cooperation amongst libraries is the most distinctive attribute of the information age. More than ever before, ICT has significantly enhanced consortia building in libraries and information centers particularly in the areas of communication and networking globally. In this study, resource sharing was adapted for consistency in articulating issues related to library cooperation.

According to Ali, Owoeye and Anasi (2010), the terms library cooperation, library collaboration, library consortia, library networking, library linkages, interlibrary loan, document supply, document delivery and access services are phrases used interchangeably to describe formal and informal library cooperation, partnership and resource sharing

activities in libraries and information centers. In this study, resource sharing has been adopted to represent the aforementioned terms.

In a study, Jerome, Esse, and Adewole-Odeshi,(2015) noted that a library consortium is a group of two or more libraries that have agreed to cooperate with each other in order to accomplish certain similar needs and normally resource sharing. They argued that the principle of library consortia is that no library can claim of acquiring all literature globally for the benefit of their users. Formation of any consortium is informed by factors which underpin their goals and objectives. These factors motivate libraries to relate closely to the activities they intend to engage in and the benefits they seek to achieve through acting as a consortium.

Resource sharing in libraries has been realized through establishment of library consortia. As pointed out by Fresno, & Yap (2013), a library consortium fulfills certain needs that may be difficult to achieve when undertaken individually. Similarly, it brings about issues and challenges that libraries seldom experience as an independent entity. Online resources are normally accessed unlike print resources which are housed in a controlled environment. The aforementioned characteristic associated with electronic information resources entails development of ways and means of evaluating and monitoring their use while at the same time ensuring their overall accessibility to the library users.

There is no library in the world that can adequately meet users' demands in terms of information resources. Currently, most publishers are publishing online due to associated benefits with this kind of venture. According to Clayton (2008), participation in library consortia has proven beneficial to both libraries and their patrons around the world.

Libraries participating in consortia building will overcome hindrances brought about by this kind of modern publishing.

Libraries are positioned to benefit greatly in a consortium environment. There are a number of opportunities for libraries which come together in a consortium. Libraries are able to conduct interlibrary loaning, share union catalogues, comparative acquisition and cataloguing. Library services are set to be greatly enhanced once libraries adapt consortium building concept amongst themselves.

Globally, consortia building is faced by myriad of challenges ranging from funding, licensing of online contents, embargo imposed to online resources by publishers, copyright related issues and so on. Forro (2014) noted that understanding copyright issues is a challenge for one's own institution but becomes even more of a demand when considering multinational implications. Laws and their interpretation vary from country to country, even though they are related or interrelated. It goes without saying that copyright and intellectual property rights also falls within this realm and can become a real challenge in a consortium building effort,

E-resources licensing is a complicated matter altogether and agreements made are not easy to understand. In a study, Forro (2014) noted that most librarians do not have any background pertaining to law documents and said that some of the terms and conditions may not be win-win situations to both parties. He further insinuates that most of the time, publishers do not agree to change the terms and conditions according to the customer's requirement. This is quite a challenge especially when an individual library decides to procure electronic information resources singly.

Electronic version of e-resources may only be available to them after a certain a period of time. This form of embargo imposed by publishers for electronic journals and e-books is another challenge that consortia faces globally. Publishers withdraw online resources once agreement period elapse leaving library patrons without resources to read and refer to thereafter.

According to Alemna and Antwi (2002), three main hindrances to library consortia building in Africa are financial, management and accessibility to materials. Libraries are least funded institutions because they are largely seen as non profit entities and therefore are not regarded as income generating units in their institutions.

Despite acquisition of e-resources, lack of functional regional networks and cost of implementation hinder accessibility of these resources to a large extent. There is also a political aspect in consortia building in Africa. Governments of the day need to be involved through relevant ministries for support in building and enhancement of information infrastructures in their respective countries.

In Africa, consortium building is positioned to enable libraries to benefit from variety of current information resources from multinational publishers. In absence of a functioning library consortium many libraries may not be able to access these resources easily due to the high cost of subscription tagged on them.

1.2.1 Examples of Consortia

A library consortium is implemented at international, regional or on a national level. According to Jerome, Esse, and Adewole-Odeshi, (2015), academic library consortia in the United States have been in existence for decades, having gained momentum in the 1970s. The development of shared catalogs and later shared purchases of electronic resources in the 1990s has increased the need for libraries to come together in consortia. Colorado's Alliance of Research Libraries (CARL) and Georgia Library Learning Online (GALILEO) are good examples in the United States.

Alemna and Antwi (2002), submitted that the most vibrant and successful development of library consortia has occurred in South Africa. South African Bibliographic and Information Network (SABINET) and Cape Libraries Cooperatives (CALICO) are some of successful examples of functioning consortia in Africa.

Kenya Libraries Information Services Consortium (KLISC), Consortium of Ugandan University Libraries (CUUL) of Uganda and Consortium for Tanzanian University and Research Libraries (COTUL) of Tanzania form examples of national consortia.

1.2.2 Kenya Libraries Information Services Consortium (KLISC)

The Kenya Library and Information Services Consortium (KLISC) was initiated in the year 2003 and it comprises of libraries in Kenya. Being a national consortium, it has grown in leaps and bounds to include libraries in public, private universities, research institutions, public libraries, Kenya National Archives among others.

This consortium is mandated to bring libraries in the country together for the mutual benefit of resource sharing. Their main objective is to spearhead collective subscription of electronic resources to handle the growing cost of procuring information resources to libraries in the country. It enables libraries to access e-resources through a subsidized price in a cost-sharing module.

Consortium building in Kenya faces many challenges ranging from financial, human resource in areas of ICT, under developed ICT infrastructure in the country to mention but a few.

1.2.3 Laikipia University

Laikipia University has a unique history that has evolved through different educational phases. The Institution was established in 1929 as a whites' only primary school with a large farm by a British Colonial farmer and educationist by the name William Thomas Alfred Levet. Between 1965 and 1970, the Institution served as a Large-scale Farmers training college (LSFTC) under the Ministry of Agriculture and Animal Husbandry. In 1979, it was converted into Animal Husbandry and Industry Training Institute (AHITI) offering a two year course leading to a Certificate in Animal Health. Later it operated as a Diploma Science Teacher's college under Ministry of Education from 1988-1990. Egerton University took over the management of the Institution on 1st July 1990 as a constituent college located in Naivasha. It remained a campus of Egerton University between 1990 till 2010 and majoring in Bachelor of Education and Bachelor of Arts courses. In 2011 it became a constituent University College of Egerton University until February 2013 when it became a fully fledged University

Currently, the university comprises of 10,345 undergraduate students, 584 postgraduate students. The university offers various academic programmes ranging from Certificates, Diplomas, Bachelors, Masters and Doctorate degree programmes. Laikipia University Library caters for all the faculties academic as well as research needs. It is a registered member of The Kenya Library and Information Services Consortium (KLISC) and subscribes to both e-books and e-journals from the consortium.

1.3 Statement of the Problem

The library as an establishment is at the crossroads in this age of information explosion. Presently, publishers are publishing electronically more than ever before courtesy of the associative cost benefits presented to them by the new technology. Equally, academic libraries are expected to keep pace with ever changing technological world if they are to continue being relevant to their users and at the same time remaining focused in fulfilling their mission and vision to which they have been established. Libraries have formed or joined consortiums in a bid to bridge the knowledge gap that may manifest itself in this era of Information Communication Technology (ICT). Laikipia University Library subscribes to Kenya Libraries Information Services Consortium (KLISC) and library user surveys indicate low usage of e-resources from the consortium despite huge financial allocation towards their acquisition. Library consortiums are uniquely positioned to cushion member libraries against the effect of ever dwindling budgetary allocation from funding agencies and mother institutions as well. Library patrons on the other hand are expected to interact and utilize these resources with ease in meeting their academic and research requirement. The survey indicates that users in Laikipia University are not comfortable while using these resources. Towards this end, there is low uptake of e-resources from the consortia bringing about the question on the efficiency of KLISC programs on training and

marketing of their products and resources to member libraries. Underutilization of these resources leads to wastage of finances and it becomes necessary therefore to establish the efficiency of KLISC in provision of e-resources in academic libraries and understand the factors that have continued to contribute to their low uptake in a bid to correct the situation particularly in Laikipia University.

1.4 Purpose of the Study

The purpose of this study was to review the efficiency of the Kenya Libraries Information Services Consortium (KLISC) in provision of e-resources in academic libraries in Kenya with a view of enhancing its products and services to member libraries and in particular Laikipia University.

1.5 Objectives of the Study

The objectives of the study were;

1. To ascertain adequacy of training offered by KLISC towards utilization of e-resources by library users in Laikipia University;
2. To establish marketing approaches employed by the consortium in promotion of e-resources;
3. To find out views on relevancy of KLISC products and services in meeting users needs in Laikipia University.
4. To identify challenges faced in utilization of e-resources provided by KLISC to its members;

1.6 Research Questions

The following were research questions that guided the study;

1. What kind of training and user support is offered by KLISC to library users in Laikipia University?
2. How does KLISC market its products and services to libraries in Kenya?
3. What are the users' views about the relevancy of KLISC products and services in Laikipia University?
4. What are the challenges faced in utilization of e-resources provided by KLISC to its members?

1.7 Significance of the Study

The success of this study would go along way in encouraging libraries in Kenya and in particular academic libraries to come together in library cooperation and reap the benefits presented to them by prospects of being in the consortium. By joining the consortia, libraries would be guaranteed of high quality information resources and steady library clientele while at the same time ensuring proper utilization of subscribed to e-resources and therefore ensuring return on investment.

The findings of the study gives direction of best practices in information sharing environment and act as a knowledge base for decision making for both KLISC in formulating marketing and training programs and to libraries intending to come together in a consortia. The study forms a basis for ensuring libraries services are improved.

Finally, findings of the study offer a framework for monitoring and evaluation of acquired e-resources and their usage in libraries and information centers. Hence this study

contributes immensely to the knowledge base on library consortium building in Africa in a digital environment.

1.8 Limitations and Delimitations

1.8.1 Limitations

The study was limited to publisher's databases provided by KLISC. Therefore the research findings were not as representation for other library services such as library websites, Online Public Access Catalogues (OPACS) and the Institutional Repositories (IRs).

The study may also experience limited and inadequate literature on library consortia building, cooperation and resource sharing in Kenya. This is because consortium building in libraries has not been fully embraced in Africa in general and specifically in Kenya and there may be limited research undertaken on the same.

1.8.2 Delimitations

The study was delimited to KLISC strategies in training and marketing activities of its services and products. Issues such as licensing and copy right of e-resources were not studied because matters of negotiation with publishers are dealt with by the consortium management and therefore do not directly involve interventions of sample population under study.

Another noticeable delimitation was on the target population. Undergraduate students were not studied because many faculties in the university do not require research writing

in their curriculum and therefore were not frequently utilizing the databases provided by KLISC and especially the e-journals and e-books.

1.9 Assumptions of the Study

This study assumed that:

- i) Library staff identified as respondents have been trained by KLISC directly or indirectly on access and use of e-resources;
- ii) All post graduate students in the university chosen for the study have basic ICT skills in enabling them access the subscribed to e-resources;
- iii) The selected sample of the respondents would give appropriate information in the questionnaires and would represent the population;
- iv) That there would be no internet downtime during the entire research period.

1.10 Theoretical Framework

According to Kombo and Tromp (2006), a theoretical framework is a collection of interrelated ideas based on theories which accounts for or explains phenomena. A theory is an interrelated set of constructs or ideas constructed to explain, predict or make clear a phenomenon by way of relationship, behavior or events. It follows then that theoretical framework is the structure that can support or hold a theory of a study or a research. Therefore it is a group of related ideas that provides guidance to a research project undertaking.

The study was informed by National Resource Sharing Network model developed by Bibhuti Bhusan Sahoo in the year 2002. This model guided the development of National

Resource sharing Network by the Indian Government. According to Sahoo (2002) the model was mandated to achieve the following objectives to:

- i. Develop a resource sharing strategy for India at both national and regional level;
- ii. Develop a database of Information resources available in India with the help of existing information networks;
- iii. Proper use of Information Technology (IT) in providing information services in all disciplines;
- iv. Achieve economy in the use of resources, money, man and materials (3Ms);
- v. Establish cooperation among different types of Information networks, information centers, libraries including National Library of India;
- vi. Support the formation of existing resource sharing networks in all States;
- vii. Encourage and Promote adoption of standards in library networks and operations;
- viii. Foster discussion in the library and information communities on all aspects of resource sharing, including:
 - Cooperative cataloguing,
 - Coordinated collection development,
 - Interlibrary loan and document delivery, and
 - Resource sharing databases

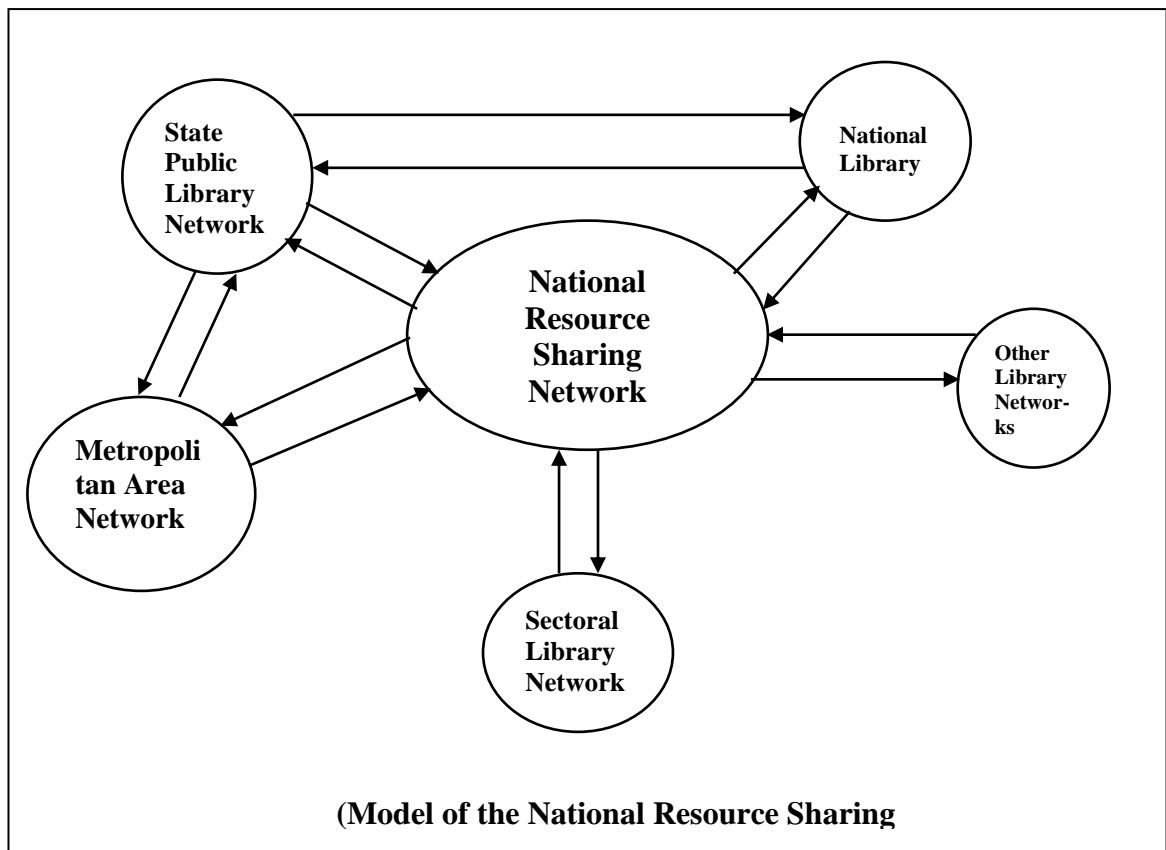


Figure 1.1: National Resource Sharing Network model

Source: Sahoo (2002)

The National Resource Sharing Network (NRSN) acts as the main server and is central to the cooperating libraries. Libraries in this model automate their collection and their bibliographical databases are kept accessible through the network. Every library in the network connects to its immediate nodal network. For instance a state public library and equivalent of a national library in Kenya is connected to all its branches in the country where they draw resources. Standard protocol (Z39.50) is implemented to allow sharing of resources in each entity of these smaller networks. The state public library node is connected to the national library and all of them, including the regional and sectoral networks are connected to the National Resource Sharing Network for the purpose of resource sharing.

KLISC acts as the coordinating body of all the member libraries in the consortium. Just as NRSN is not responsible for ICT infrastructure in the participating libraries so is KLISC. In addition, the KLISC foundation objectives are in tandem with listed NRSN model objectives. This theory was relevant to this study in two ways:

- i. Acquisition and selection of Information resources is facilitated by a central organization committee;
- ii. Promotion and training on access and utilization of information resources to members are conducted centrally thereby ensuring uniformity of training in usage of products and services provided to cooperating libraries.

Finally, NRSN is a model containing all possible quantitative and qualitative variables related to the research objectives and therefore it would be sufficient for the study.

1.11 Conceptual Framework

According to Kumar (2011), a concept is a word or phrase that symbolizes several related ideas that are used as a vocabulary for understanding the research problem. He further says that a conceptual framework is a set of ideas and principles that represents specific direction by which the research would have to be undertaken. In other words it describes the relationship between variables identified in the study and forms the basis of the research. In this case independent variables are training and marketing while dependent variables are ease of use of e-resource and more libraries joining KLISC. The following is a conceptual frame work for this study:

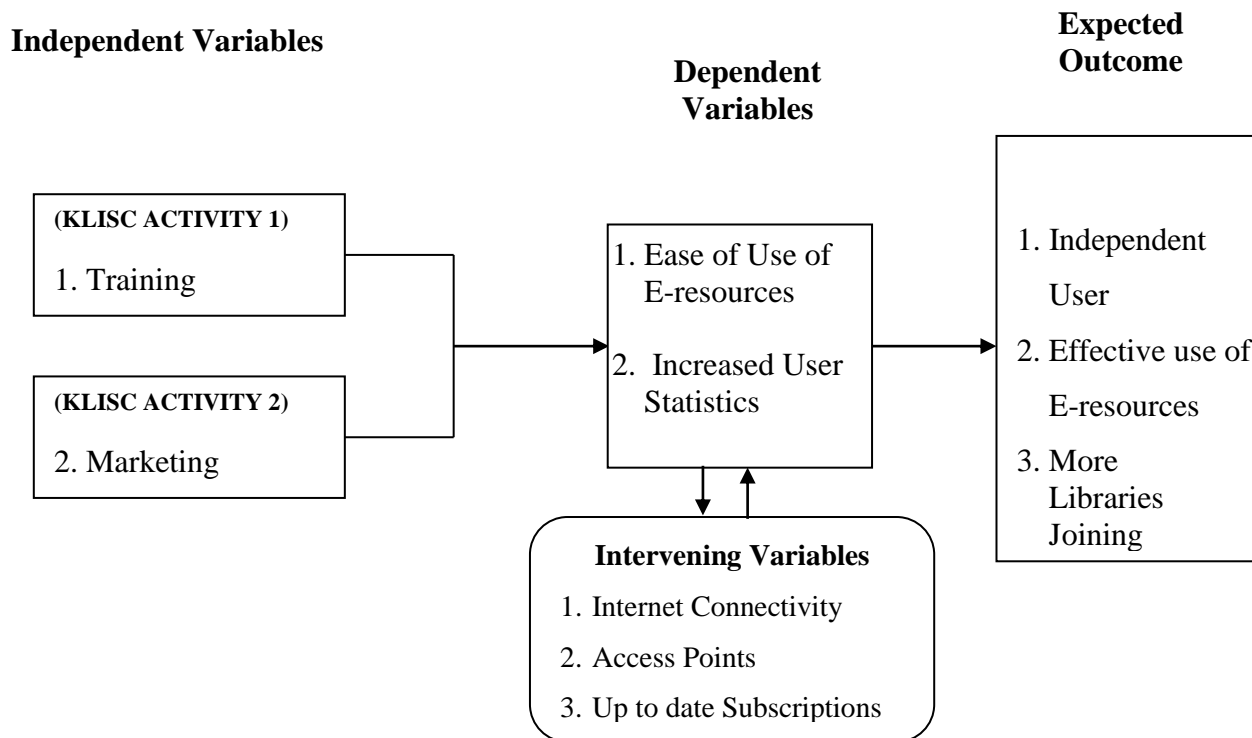


Figure 1.2: Relationship between different aspects of e-resources and the expected outcomes

Source: The researcher

1.12 Operational Definition of Terms

In this study, the following terms were operationally be defined as follows:

E-journals: In this study, an e-journal (electronic journal) refers to a periodical or a serial publication which is available online provided by KLISC.

Library Consortium: in this case, it is national cooperative association of libraries that brings together librarians and libraries to achieve a mutual purpose such as sharing of resources in order to improve services to their clientele.

Library Cooperation: In this study, it refers to a mutual beneficial sharing of resources by two or more libraries.

Marketing: In this study, marketing is used to refer to the ongoing process promotion of services and products and aids library staff and users in making decisions to

use, refer, and download information resources of choice from promoting body like KLISC

Remote Access: Remote access in this study is being able to get access to library information resources away from the institution or library building.

Resource Sharing: this term implies transactions aimed at availing information resources not available in a particular library and are needed by the library clientele.

Website: In this study, it refers to web pages of member libraries in the consortium and the publishers or vendors websites where e-resources are found.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviews the literature in topics related to the need of library cooperation in academic libraries, objectives of library cooperation and the establishment of library consortia globally and Kenya in particular. It entails evaluation of pertinent information in line with study objectives of ascertaining adequacy of training on e-resources as well as marketing the same. Findings presented in previous studies on benefits and challenges of library cooperation aids in answering research questions and thus gaining an in depth knowledge and understanding of the research area. The chapter also gives a summary of the research gaps identified in the literature reviewed.

2.2 Historical Background of Library Cooperation

According to Nfila and Darko, (2002) the official use of the term library consortium has no precise date. They insinuate that from time immemorial, cooperation involved collaboration among libraries in areas of collection development, storage facilities, human resource especially in the field of cataloguing and classification and sharing of a union catalogue. However the idea of a consortium as an association or cooperation has been an ideology of librarianship. Sharing of a union catalogue continues to dominate as a form of resource sharing to date. Many libraries have adopted copy cataloguing from Library of Congress (LC), World Cat (WC) and many more union catalogues available from the World Wide Web (WWW). A different type of cooperation has mainly been on inter-library lending (ILL) services where libraries that cooperate agree to reciprocally borrow insufficient resources from cooperating libraries.

Millard (2010), in a study said that the growth and expansion of communication network in the late 19th and early 20th centuries in terms of railway, postal and telephone services in the United States of America gave birth to a reliable interlibrary loaning service amongst libraries. This aspect saw the first successful library cooperative activities being established towards benefiting users particularly and libraries in general on a large scale basis.

A new phenomenon in library cooperation is in the area of internship programs to improve the professional skills of librarians and information professionals. Increased use of computers in library processes and services such as cataloguing and information retrieval were some of major library milestones that were realized during this period.

2.2.1 International Coalition of Library Consortia (ICOLC)

According to Feather C. (2015), the International Coalition of Library Consortia (ICOLC) is an informal group of library consortia globally that exists for strategic planning and for discussion of issues of interest to members. It has been in existence from 1996 and serves all kinds of Libraries world over. Globally, there exist about 170 consortia which are profiled on the ICOLC website. ICOLC first met in 1997 as the Consortium of Consortia (COC).

Over the years, its name has been adjusted to reflect its worldwide character. ICOLC normally meet twice per year to keep the participating consortia abreast on the latest electronic information resources, pricing practices of publishers and vendors. From time to time ICOLC also issues statements regarding topics which affect libraries and library consortia in a bid to bringing them to a common understanding. Library consortia may be

located anywhere in the world that are in common agreement with the ICOLC and are welcome to participate in the activities of ICOLC. The absence of the membership fee for the willing consortia to join ICOLC is its strength. There are a number of benefits which comes from being members of the ICOLC and ranges from:

- Cost reduction through group purchasing;
- Greater ability to advocate for library needs;
- Encouraging resource sharing (content, technology, expertise, and funding);
- Creating opportunities for joint advocacy, marketing, and fundraising for libraries;
and
- Undertaking special initiatives for the group, such as digitization, technology implementation, information sharing, or creation of a union catalog.
- Improving expertise through professional development programs for library staff;

2.2.2 Kenya Libraries Information Services Consortium (KLISC)

According to Kenya Library and Information Services Consortium (2015), KLISC purposes at bringing libraries and information services plus their stakeholders together for a common goal of acquiring the benefit presented to them by the emerging Information Communication Technologies. Its vision is to provide knowledge and information for learning, teaching and research aimed at national development. KLISC underlying functions include sharing of resources, licensing of e-resources and training. Kenya Libraries and Information Services Consortium aim to:

- i) Develop and improve cooperation and understanding among member libraries
- ii) Enhance the provision of learning resources and access to information

- iii) Work towards the creation and promotion of virtual libraries
- iv) Negotiate and subscribe to electronic databases for consortium members
- v) Encourage and support the professional development of librarians
- vi) Forge cooperation and collaborate with national and international library consortia and other relevant organizations and institutions
- vii) Provide a forum for sharing information and experiences
- viii) Develop cooperative acquisition schemes among members
- ix) Advocate for recognition and appreciation of library service.
- x) Promote intellectual property rights

2.3 KLISC partners

Kenya Libraries Information Services Consortium (KLISC) collaborates and partners with various organizations in realization of its vision and mission.

2.3.1 International Networks for the Availability of Scientific Publications (INASP)

According to Belcher (2012) INASP aims at people accessing and giving their contribution in terms of information and knowledge for development in all sector of economy globally. Consequently, INASP has been working in Kenya since 2002. Through negotiations with publishers internationally it is able to secure licenses on behalf of KLISC by negotiating with international publishers in securing national licenses at considerably reduced prices or for free on e-journals and e-books.

2.3.2 Electronic Information for Libraries (EIFL)

EIFL is a private grant-making foundation. It is an initiative of the Open Society Institute (OSI) and currently known as Open Society Foundations (OSF). It provides sustenance and at the same time offers funding to the developing nations to enable them access electronic resources.

According to Electronic Information for Libraries (2017) EIFL was the initial signatory for the Budapest Open Access Initiative (BOAI) which first created the term Open Access (OA). EIFL agenda is to remove barriers to information and knowledge sharing by promoting the adoption of Open Access (OA) procedures, mandates and policies. Through capacity building it is behind sustenance of OA repositories and journals by member libraries all over the world.

EIFL principal emphasis is on negotiation of reasonably priced subscriptions to e-journals and e-books for educational and research based libraries. Equally it extends support to newly formed library consortia in member countries through funding and consultancy services. KLISC benefit from EIFL immensely in areas such as networking, OA publishing and in dealing with intellectual property rights issues concerning information resources.

2.3.3 International Federation of Library Associations and Institutions (IFLA)

According to the International Federation of Library Associations and Institutions (2014) (IFLA) is the foremost international organization representing the welfare of library, information services and their users. It is the worldwide voice of the library and information profession. IFLA was established in Scotland in 1927 and has currently about 1600 Members in approximately 150 countries globally. IFLA was then registered in the

Netherlands in 1971 and the Royal Library of the Netherlands in The Hague provided the facilities in establishing IFLA headquarters.

2.3.4 Kenya Library Association

Kenya Library Association (KLA) is a national professional association for librarian and information professionals whose origin dates as far back as 1956. This was when the East African Library Association (EALA) was founded in Nairobi, Kenya, during the British colonial period. KLA was officially registered in Kenya in 1973 after the dissolution of the EALA.

2.3.5 Kenya Education Network, (KENET)

Kenya Education Network, (KENET), is the National Research and Education Network (NREN) of Kenya. It is licensed by the Communications Authority of Kenya as a not-for-profit operator serving the education and research institutions in the country. At the moment it serves about 56 institutions in the country ranging from public and private universities, tertiary colleges, government, research and affiliate institutions.

KENET provides inexpensive, cost-effective and low-congestion Internet bandwidth services to member institutions in Kenya. In addition KENET supports universities in Kenya technologically by offering training and consultancy services on matters regarding Information Communication and Technology. It has set up advanced electronic infrastructures for research that are accessible exclusively within the research and education community anywhere in the world.

Additional services comprises provision of shared services such as co-hosting of servers, dedicated virtual servers for e-learning systems, video and web conferencing facilities and capacity building for technical staff in educational and research sectors in the country. KENET acts as the Computer Emergency Response Team (CERT) for the academic community in Kenya.

2.4 Academic Libraries and the Need for Library Cooperation

Academic Libraries form vital components in the establishment of any institution of higher learning. They ensure delivery of institutions' mission and vision to which they were established. Consequently they support the academic as well as research programmes in these institutions; providing tools required by faculties, students, academic staff, administrative staff and the community to which they serve.

Besides, library users' quest for information is ever-changing from print based information resources to online resources and e-resources due to its ease of use in terms of searching, retrieval and manipulative capabilities. Moreover, librarians are acknowledging the increasing importance of, and reliance on, digital resources according to Casserly M. (2002). Furthermore, libraries are now reinventing their old age information services and products due to changes currently being experienced in this era of information explosion.

As Gopal M. (2002) found out, libraries and information centers are currently integrating new technologies to their existing systems, training users and improving on their information resources. This is in a bid to cope up with diverse user information needs while at the same time ensuring value addition to their products and services.

Koppel (2015) in a study observed that libraries have, for decades weighed the advantages and disadvantages of consortium membership, and have overwhelmingly decided that they have much to gain from being in a consortium. Ali, Owoeye and Anasi (2010), in a study said that one visible tendency in the information environment is that more resources are moving towards the electronic formats, and in a number of cases being made accessible only in electronic format and will never be published in any other form. De-la-Fuente et al. (2012) noted that academic libraries have been transformed dramatically today due to the provision of open educational resources and increased access to electronic resources.

The new technology has brought about a new set of library users who rarely have the time to visit the library. Library cooperation on the other hand presents good opportunities for this type of users to fully utilize the library. It is therefore important for libraries and information centers to accept this certainty of technological transformation while examining appropriateness of their current products and services. Liu (2006) reported in a study that about half of all graduate students initially referred to e-resources sources offered by the library and not the Internet. This aspect indicates the need for libraries to adapt to the new formats of information representation. Koppel (2015) says that libraries have, for decades, weighed the advantages and disadvantages of consortium membership, and have overwhelmingly decided that they have much to gain from being in a consortium.

Libraries in the world are not self-sufficient and hence the need for cooperation amongst themselves. Equally libraries that belong to a consortium share information resources on an equal basis and based on mutual understanding. This aspect of cooperation ensures that no matter the size of the library, users are served on an equal basis across the consortium.

2.5 Benefits of Library Consortium

2.5.1 Financial

The dwindling budgetary allocations to libraries from mother institutions have left many libraries and in particular academic libraries struggling to offer intended services to its clients. Moreover, electronic information resources especially e-journals are very expensive. Libraries on a mutual agreement in forming a consortium save their budgets in collaborative negotiation efforts and shared subscriptions on e-resources. Consequently, Moghaddam and Talawar (2009) in a study on benefits of library consortia noted that the consortia empower libraries to benefit from wider access to e-resources at a reasonable price. Libraries that have joined a consortium get significantly discounted rates on subscriptions of e-resources from a number of publishers in the world.

2.5.2 Collection Development (CD)

Collection development has been greatly influenced by modern technology owing to various digital formats of information resources available in the market currently. It has been observed by Jalal and Mohan (2009), as the backbone to any library and information center. It is the lifeline of libraries' smooth operation where planned acquisitions of information materials in various formats are acquired to match the academic, research and other needs of library users. Collection development is a fundamental activity in the library that integrates ongoing acquisition of current and retrospective information resources now and in the future.

Library consortium facilitates cooperative acquisition of e-resources plans among members in the consortium. The consortium aspect ensures that duplication of acquisition of information resources is avoided hence a comprehensive collection in member libraries.

2.5.3 Enhancing Inter Library Loan (ILL)

Resource sharing is one of the greatest benefit of any consortium establishment in the world for libraries. Today, the capability for a library user to access resources is often more significant than collection building itself. In a study, Pandian, Jambhekar and Karisiddappa (2002), found that consortia guarantees low prices for resources, efficient and brings equality in information accessibility and use to libraries. Equally, libraries participating in a consortium will be able to access other libraries' resources other than their holding alone. This characteristic will easily bridge the gap between information resources poor libraries and information rich libraries. This consortium feature greatly enhances and increases collective strength of resources for the participating library. ILL can further be enhanced when libraries participating in a consortium develop common resource database such as a union catalogue and make it available through the Internet.

2.5.4 Remote Access to Library Resources

According to Bedi and Sharma (2006), access to resources is now considered more important than the collection building. One of KLISC objective is to work towards the formation and promotion of virtual libraries in Kenya. Distance education is becoming a norm in most institutions of higher learning and a number of enrolments have continued to rise over the years. Library consortia facilitate distance learning by availing information resources to library users remotely. Mutula, (2004) points out that, it is through initiatives of adopting new technologies that Kenyan libraries and those in developing countries can continue to accomplish their missions and core values and as a result satisfy the user information needs.

In a study Burley, Gnam, Newman, Straker, and Babies (2012) observed that academic institutions must respond to a shifting and challenging setting of education in a progressively globalized world and learn to effectively apply different methods of delivering their products and services to their diverse clients. The consortium in this regard has become an instrument for delivery of academic and research resources to students in off campus programmes. It acts as channel for collaboration amongst instructors and students nationally and internationally.

2.5.5 Source of Up to Date Information

Library consortia form a basis for the latest information for researchers and scholars. Publishers have taken advantage of the Information Communication Technology (ICT) and are publishing online more than ever before. E-publishing has taken the industry by storm due to the benefits it offers to publishing houses. Equally it has made libraries and information centers avail latest scholarly and research information to its clients in a quick and efficient way.

2.6. Kenya Libraries and Information Consortium (KLISC) Activities

2.6.1 Training and User Support

Presently e-resources have brought new opportunities to library clients. Subsequently, Shibanda (2006) noted that practices from the African case studies and particularly in a Kenyan situation, the use of electronic journals are mostly affected at numerous stages of facilitation. Training users on e-resources access and use will create an independent library user. According to Rathmel, Mobley, Pennington, and Chandler (2015), Training in electronic resources troubleshooting is exceptional in that it includes openings for training of both library staff and users. KLISC has greatly enhanced availability of information to its

111 member libraries. The availability of these resources does not necessarily mean actual use and much of this information may end up not being utilized or not being used at all. To ensure usage, both staff and patrons will require continuous training on e-resources provided by KLISC.

2.6.2 E-Resources Marketing

Kotler, (2008) defines marketing as; the analysis, planning, putting into practice and control of formulated programs intended for voluntary exchanges of values with target markets aimed at achieving set objectives of the organization. The emergence of new technologies and communications has seen institutions gain interest in marketing their services. Through marketing strategies, KLISC can improve its visibility and image, thus attracting indecisive libraries or those who are unaware of the consortium capabilities brought about by the aspect of resource sharing.

KLISC will only surpass the expectations of member libraries if its management embraces marketing and promotion of its products and services. Kaur (2009) found that, libraries are learning that by applying marketing practices and principals, they can easily enrich their user's requirements, justify funding by mother institutions. Moreover they can ensure communication is more effective with a diversity of external clients thereby achieving efficiency in delivering products in terms or information resources and services to both the identified and unidentified of users.

Many library WebPages are embedded in their funding institutions websites especially in the case of academic libraries. This implies that KLISC activities will reach wider audience once an agreement is reached with participating consortium members. Similarly

the publishers and database vendors will similarly benefit from this endeavour since their efforts for marketing, providing services and technical support will greatly be improved.

2.7 Summary of the Chapter and Gaps Identification

The literature review has clearly shown that libraries in general and academic libraries in particular are embracing cooperation opportunities brought about by the emerging technologies towards meeting their ever increasing needs of their clientele. Further, it has emerged that publishers are now publishing in electronic format immensely bringing forth legal issues pertaining to contracts, usage of material and issues related to backup and archiving of these resources within the consortia.

E-journals on the other hand are very expensive for a single library to acquire individually and hence the need for a consortium. The study therefore seeks to find out the provision of these resources by the consortium towards realization of libraries mission and vision to which they were established.

A study by Bedi and Sharma (2006) indicated that electronic publishing has brought a revolution in journals publication, subscription as well as access to the scholarly literature and that the library consortium is an emerging toolkit for libraries to continue surviving if they have to provide required services to their users. This study therefore seeks to find out the extent to which information resources provided by KLISC is being utilized by member libraries.

Much literature has been done pertaining consortium building in developed countries and very little study on the same in Africa and Kenya in particular. Therefore the study

contributes knowledge towards consortium building in the developing countries in a big way.

2.8 Challenges of Consortium Building

Data in Laikipia University library indicate that very few postgraduate students access and utilize publisher's databases provided by KLISC despite their high cost of subscription. According to Brophy, Craven, and Markland (2008), libraries have had extensive knowledge in building print-based collections and digital resources continue to pose many challenges. Laikipia University Library is not an exception to this scenario.

KLISC provide digital resources to its members in form of e-books and e-journals which are not fully utilized. In addition Moghaddam and Talawar (2009) said in a study that some hurdles such as poor communication infrastructure, insufficient funds, and approaches to consortia are notable limitations to consortia activities in developing countries. The following are challenges synonymous with consortium building of which Laikipia University Library is not an exception:

- i) Despite wide access to e-journals and e-books compared to print resources, these resources are exposed to annual subscriptions imposed by publishers. This aspect implies therefore that their use is pegged on the duration of the subscription. If that period expires access to these resources will not be possible.
- ii) Archiving of e-resources need to be undertaken for posterity and to ensure continued utilization once the contractual agreement period has elapsed. However this is not the case.
- iii) Usage statistics does not reflect actual usage of resources. This aspect is brought about by server time outs which forces a user to re-login, power outages, internet

down time and inexperienced users among others. Therefore monitoring and evaluation of these online resources is a task that needs to be undertaken.

- iv) Off campus access to e-resources in Laikipia University is not possible. This is because KLISC prefer Internet Protocol (IP) authentication model which allows only access within the campus. To access these resources remotely authenticating software need to be acquired.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses the research design for the study, variables of the study, location, target population, sampling procedure and sample size. Research instruments, validity, reliability, data collection procedures and data analysis.

3.2 Research Design

According to Kumar (2011), research design is a procedural plan that is adopted by the researcher to answer research questions validly, accurately, objectively, and economically. The research design in this research was a case study. David and Sutton (2011), defines a case as an individual unit being studied and could be a person, an institution, a household, and organization and so on. It is an intensive analysis of an individual unit stressing developmental factors in relation to environment. Further, Kumar (2011) argues that, the case study design is founded upon the assumption that the case in question is typical of cases of a certain type and consequently a single case can provide insight and understanding into the events and situation prevalent in a group from where the case has been drawn.

This method was found to be suitable in this study because it is flexible of all research designs and equally allows the researcher to maintain the holistic characteristics of real life events while investigating empirical events. It also allows numerous sources of evidence to be collected through interviews and structured surveys. Further, the information collected is suitably inferred to other similar situations and in this case libraries and

information centers experiencing similar problems. This design was chosen because of its flexibility, dynamics and addressed research questions.

3.3 Variables

Kumar (2011) defines the term variable as a perception, concept, or an image that is capable of measurement. In other words it is a rational unit of measurement that can assume any one of a number of chosen sets of values. This study uses training and marketing of e - resources to library patrons as independent variables on one hand. Ease of use of e-resources and increased consortium members are dependent variables on the other hand. Reliable Internet connectivity, up to date subscription of e-resources and number of computer access points were identified as intervening variables because they linked independent and dependent variables and assumed effect on both of them.

3.4 Location of the Study

This study was conducted in Laikipia University which is a public university located in Laikipia County, Kenya. This study location was purposively chosen by the researcher because it fell under the category of an academic institution and a registered member of The Kenya Libraries Information Services Consortium (KLISC) and subscribes to the consortiums' services as well as the products.

3.5 Target Population

Library staff were sampled for the reason that they are targeted by KLISC for training on technical aspects, retrieval and use of e-resources. Library staff in turn trains library users during orientation of new students and on a continuous basis. In addition they also offer other varied services to library patrons ranging from trouble shooting of the publisher's

databases, monitoring and evaluation of these resources and are involved in promotion of KLISC products and services to the Laikipia University Community. A total of twenty three (23) library staff were selected out of the twenty four (24) who were based in the main campus.

The second target population of this study comprised of selected postgraduate students. This category of library patrons utilizes e-resources from KLISC on their day to day academic and research activities. A sample of two hundred and thirty seven (237) library patrons were selected from a total population of five hundred and eighty (584) postgraduate students in various disciplines offered at the Laikipia University. A requirement that they conduct research before they graduate ensures that they interact with a number of e-books and e-journals at various stages during their research writing period. The two groups chosen were found to be suitable for the study because they possessed information useful to answer the research questions.

3.6 Sampling Techniques and Sample Size

3.6.1 Sampling Techniques

According to Singh and Masuku, (2014), sampling is associated with the selection of a subset of individuals from within a population in order to estimate the characteristics of a whole population. In other words sampling is the process of selecting a few respondents from a bigger group for the purpose of data collection. A sampling technique therefore is the exact method used to select a sample for a study.

Purposive sampling method was used to select respondents for this study. According to Mugenda and Mugenda (2003), this technique allows a researcher to use cases that have the necessary and required information in respect of the objectives ones study.

Kumar (2011) noted that the major consideration in purposive sampling technique is the researcher’s judgement as to who can give the best information to realize the objective of the study. He noted that, inferences drawn identified samples can be generalized to the total sampling population.

The researcher purposively included Laikipia University library staff mostly at the service points of library users and postgraduate students present in the library and especially those utilizing library e-resources provided by KLISC.

3.6.2 Sample Size

A sample is a subgroup chosen from the entire population for the purpose of data collection in a study. The sample selected should be a representative of the whole population. The sample in this research was calculated using (Yamane, 1973) formula with 95% confidence level. The following formula was used to calculate the sample size in this study:

$$n = \frac{N}{1+N(e)^2} \quad \text{(i) Library Staff} = \frac{24}{1+24(0.05)^2} = 23 \quad \text{(ii) Students} = \frac{584}{1+584(0.05)^2} = 237$$

n = sample size

N = Population size

e = Allowable error (0.05)

Table 3.1: Sample size of the study group

No.	Subgroup	population	n	Sample Size
1.	Library staff	24	22.641	23
2.	Postgraduate Students	584	237.398	237
	Total	608	260.039	260

3.7 Research Instruments

The research instruments that were used in the study comprised questionnaires and interview schedules. Both were formulated guided by the study objectives and the research questions of the study.

3.7.1 Questionnaire

The questionnaires were distributed by the researcher and the research assistant and the responses were collected within the stipulated period of time. The questionnaire used in the study was constructed and categorized in four sections;

- i) Section A: Respondent's details
- ii) Section B: Promotion of e-resources
- iii) Section C: Adequacy of training and user support
- iv) Section D: Challenges of using e-resources

3.7.2 Interview Schedule

An interview schedule was prepared based on the research objectives and used to interview library staff from Laikipia University Library. Prior to the interview, the researcher made appointments with the respondents to ensure that they were available. On arrival, the researcher provided the introduction letter and an interview schedule for

respondents. During the interview sessions, data was recorded in hand written notes which were later transcribed in the computer for analysis.

3.8 Piloting the Study

According to David and Sutton (2011), piloting involves pre-testing of the research instruments with a small sub sample of the target population in a bid to identify weaknesses within data collection instruments. After the research instruments had been constructed a pilot study was conducted on a sample of ten (10) post graduate students of Egerton University and four (4) Egerton University Library staff. Piloting the study aimed at establishing whether the questions asked were appropriate to the study and whether the responses received were clear or not. The data obtained was used for quality control while at the same time modifying the instruments before they were administered to the target population of the study. According to Mugenda and Mugenda (2003), the procedures in piloting the study should be identical to those which are to be used in real data collection. This was ensured when the researcher was in the field.

3.9 Validity

According to Mugenda and Mugenda (2003), research validity refers to the appropriateness, usefulness and meaningfulness of the instrument and includes adequate representation in the questions or items therein. The content validity of the research instruments was established to reflect the research content. David and Sutton (2011) say that, in its simplest form, validity is related to measurement procedures.

The researcher employed more than one instrument of data collection to ensure validity was maintained in this study. Questionnaire and interview schedule were used to collect

data and were professionally constructed to eliminate errors. To standardize data collection, the researcher held training sessions with research assistants on the same. In addition, the researcher used triangulation by comparing related data from the two categories of respondents in this study, that is, the library staff and selected postgraduate students.

3.10 Reliability

Kumar (2011) defines reliability as the capability of a research instrument to yield similar results when used repeatedly under similar environment. It indicates constancy, accuracy and predictability of the research instrument. Reliability aids in the establishment of internal consistency, interpretation of data and predicting of the value scores.

To ensure research reliability in this study, the researcher ensured the following precautions were adhered to. To begin with, respondents were purposively selected to participate in the study thus ensuring that best information is provided to achieve the objectives of the study. Secondly pilot study was conducted at Egerton University for quality control while at the same time pre-testing the research instruments to ascertain whether they produced the expected results and modifying them where necessary. Thirdly formulation of the questionnaires and the interview schedule questions were done in tandem with the objectives in order to keep within the focus of the study.

3.11 Data Collection Technique

The Researcher obtained a research permit from National Commission for Science Technology and Innovation (NACOSTI). The permit enabled the researcher to seek permission to conduct the study at Laikipia University. Sufficient time of one week was

given to the respondents of the questionnaires and three days coupled with ample time for all the interviewees.

3.11.1 Data Analysis

The analysis of quantitative data from the study, Statistical Package for Social Sciences (SPSS) version 22 for Windows was used. Descriptive statistics such as frequency distributions and percentages were used in examining and analyzing the collected data while interpretation of the data was presented in form of tables, charts, and graphs.

According to Mugenda and Mugenda (2003), data analysis in qualitative research is sometimes ambiguous and time consuming. Various categories of qualitative data were established and their relationships. Themes and categories were generated and relevant codes generated manually. Qualitative data from the open questions on both instruments were analyzed qualitatively by categories, themes and patterns.

3.12 Logistical and Ethical Considerations

3.12.1 Logistical Considerations

The researcher sought for permission and clearance from all relevant authorities to conduct research. Specifically, the researcher sought for permission from the National Council for Science, Technology and Innovation (NACOSTI). An introductory letter from Kenyatta University was equally sought before proceeding to the field to collect data.

3.12.2 Ethical Considerations

Before collecting data from the respondents of this study, the researcher ensured that all instruments were valid and reliable to generate useful information for the study. Data

provided by respondents was treated with confidentiality and the respondents' right to privacy was respected. In addition subjects were recruited upon their informed consent and the data collected from them were based on research objectives and research questions. The researcher ensured and reassured the participants that all information given was treated with highest confidentiality and was used for academic purpose alone. Finally, the researcher avoided plagiarism by acknowledging the authors quoted in the study.

CHAPTER FOUR

PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the findings, interpretations and discussion in line with the objectives of the study. The respondents comprised library staff and post-graduate students of Laikipia University. The data obtained was presented in form of tables and graphs. The researcher then drew inferences from the findings so presented.

4.2 General and Demographic Information

4.2.1 Response Rate

The sample was comprised of 23 library staff and 260 post-graduate students. Interview schedule was used to gather information from the library staff while post-graduate students were issued with structured questionnaires to fill. The first category comprised of 23 library staff out of which 18 were available for interview during data collection period forming 74%. On the second category 185 questionnaires were properly filled and returned thereby forming 71%.response rate. According to Mugenda & Mugenda (2003), 50% response rate can be used to establish the research objectives and answer the research questions. In this case the response rate in this study is very appropriate.

4.2.2 Demographic Data

This section presents findings on the respondents' background information of importance in the study which included: gender and Information Communication Technology (ICT) proficiency.

Table 4.1 below indicates category one of respondents by gender from Laikipia University Library. Male respondents formed the majority at 56% while female respondents were at 44% respectively. This was considered important because the gender bias in this category is eliminated.

Table 4.1: Library Staff by Gender

Gender	Frequency	Percentage (%)
Male	10	56
Female	8	44
Total	18	100

The second category of respondents comprised of post-graduate students of Laikipia University. Table 4.2 indicates frequency of respondents in this study. Majority of them were female respondents at 54% while male respondents were at 46%. This was considered vital because it would help the researcher arrive at conclusions which are not skewed based on gender of respondents.

Table 4.2: Post-graduate students by gender

Gender	Frequency	Percentage (%)
Male	86	46
Female	99	54
Total	17	100

4.2.3 ICT Skills Levels

According to Okello-Obura and Magara (2008), you cannot access e-resources without adequate computer utilization skills. The effective utilization of electronic information

resources can only be realized when one has knowledge on computer use. It was therefore important for the researcher to establish computer skills of the respondents because it has an impact on how respondents interact with e-resources in this institution. The findings in figure 4.1 indicated that majority of library staff had basic training in ICT at 44%, respondents with average level of ICT training was at 39% and only 17% of the respondents had advanced training in ICT. The researcher considered this important because it could have an impact on training of e-resources to post-graduate students.

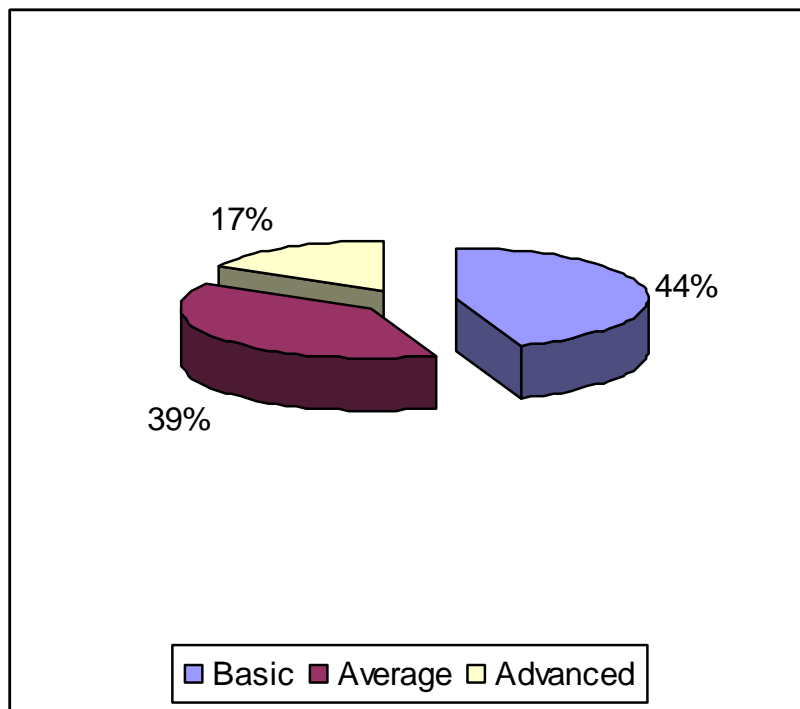


Figure 4.1: ICT skills for library staff

Source: Field Data (2017)

The findings in figure 4.2 indicated that majority post-graduate students at 55% had basic training in ICT. 30% of them had average ICT training while those who had advanced training in ICT were at 15%. Their responses would help establish whether respondents' levels of ICT skills could affect them in effective utilization of e-resources provided by KLISC.

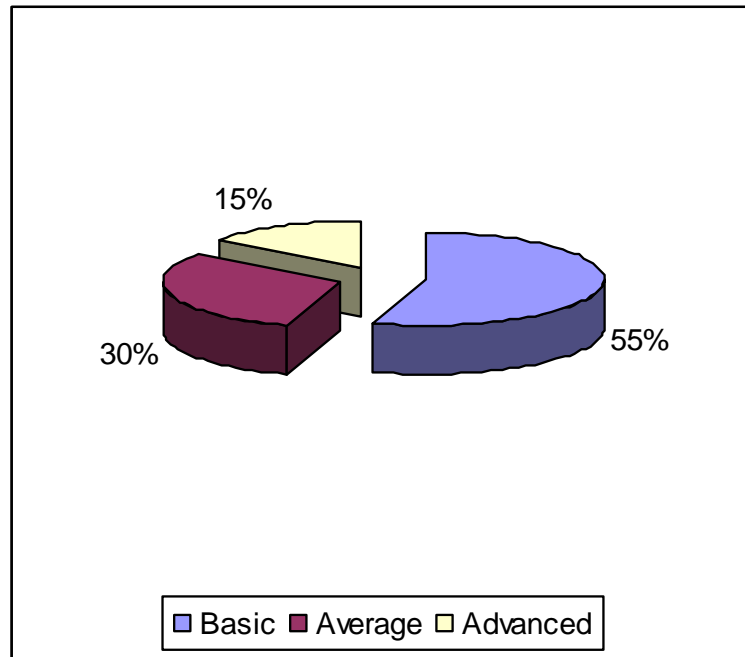


Figure 4.2: ICT skills for post-graduate students

Source: Field Data (2017)

4.3 Promotion and Marketing of E-resources by KLISC

Promotion and marketing creates awareness of KLISC products and services. From the responses in figure 4.3, majority of post-graduate students were aware of the presence of e-resources from KLISC in Laikipia University. The study finding therefore shows that majority of the respondents were aware of presence of these resources in their library. This data is important because it has policy implications on librarians need to be kept abreast with the emerging technologies in a bid to always be ahead of their library clients.

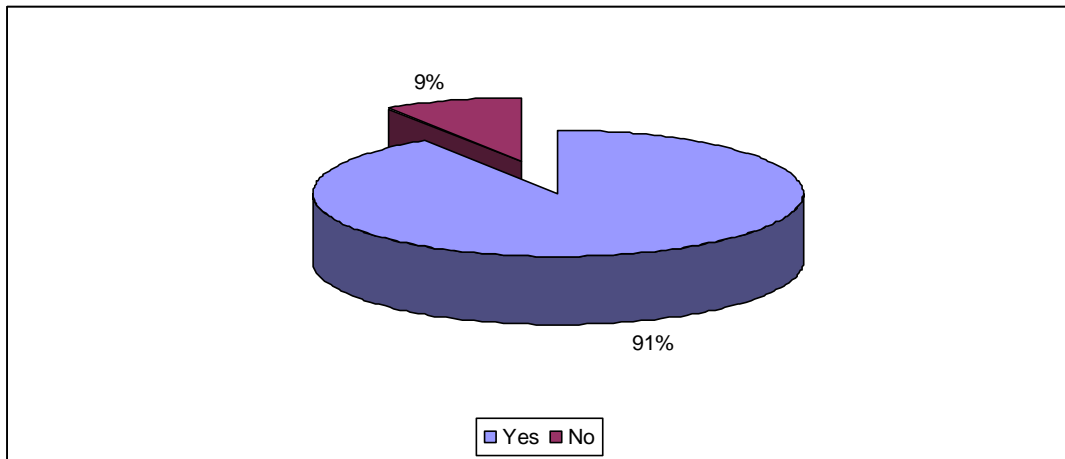


Figure 4.3: Post-Graduate Students knowledge of e-resources provided by KLISC

Source: Field Data (2017)

Data from the library staff indicated that 89% of respondents showed that KLISC used publishers in marketing their e-resources as indicated in table 4.3. Newsletters and brochures equally played a major role in marketing and promotion of products and services from at 76%. Posters significantly show that 61% of respondents pointed out that KLISC markets its products and services through them. Over half of the respondents at 56% indicated that KLISC do promotion of their products and services through workshops and training. Book marks and other gifts such as branded pens, notebooks and memory sticks issued to library staff during KLISC seminars and workshops also aid in promotion and marketing of their products and services at 44%. Emails and social media were found to be the least method used in marketing at 39%. The researcher considered this information vital because it will translate to awareness and thereby leading to maximum utilization of e-resources from the consortium.

Table 4.3: Library staff marketing strategies of e-resources provided by KLISC (Multiple Responses)

	Method	Respondents	Percentage (%)
i)	Newsletters/ Brochures	15	83
ii)	Posters	11	61
iii)	Workshops /Training	10	56
iv)	Publishers	16	89
v)	Emails/social media	7	39
vi)	Others	8	44

Having established that the majority of post-graduate students were knowledgeable of e-resources provided by KLISC at 91% as indicated in Figure 4.3 the researcher sought to find out the methods in which this awareness was created.

As indicated in Table 4.4, 84% of the majority respondents indicated that they were made aware of the e-resources through library orientation. 76% of the respondents indicated that library training sessions also plays a major role as indicated in the findings while training manuals were equally vital at 74% respectively. Notice boards and posters are important in promoting awareness of e-resources at 66% and 52% respectively. Lectures and social media at 43% and 37% respectively can still be effective if enhanced and adopted. Fellow course mates, workshops and seminars are not very effective. Therefore the study notes that if orientation programmes would be enhanced it could be a preferred and effective methods of promoting e-resources in member libraries.

Table 4.4: Means of knowledge of e-resources from KLISC by post-graduate students (Multiple Responses)

	Means	Respondents	Percentage (%)
i)	Library orientation	155	84
ii)	Lecturers	80	43
iii)	Friends and Colleagues	42	23
iv)	Library training sessions	141	76
v)	Seminars/ workshops/conferences	63	35
vi)	Through Training manuals	136	74
vii)	Posters	96	52
viii)	Notice boards	122	66
ix)	Others (Social media, websites, telephone etc)	69	37

Respondents were asked to indicate the frequency of access to e-resources and the results were recorded in table 4.5. The majority of the respondents indicated that they infrequently use the e- resource on a monthly basis at 73% and on a weekly basis at 60%. Post-graduate students who use e-resources daily are less than half and those who never used the resources stood at a partly 2%.

Table 4.5: Frequency of E-resources usage

Usage	Respondents	Percentage (%)
Daily	56	30
Weekly	111	60
Monthly	135	73
Rarely	24	13
Never	3	2

4.3.1 Devices Used in Access and Use of E-resources

Figure 4.4 indicates post-graduate students at Laikipia University choice of devices in accessing e-resources. 44% of respondents indicated that they use laptops in utilizing e-resources. 24% of them prefer library computers while 18% uses smart phones. 14% indicated choice of Ipads, tablets and so on in accessing e-resources.

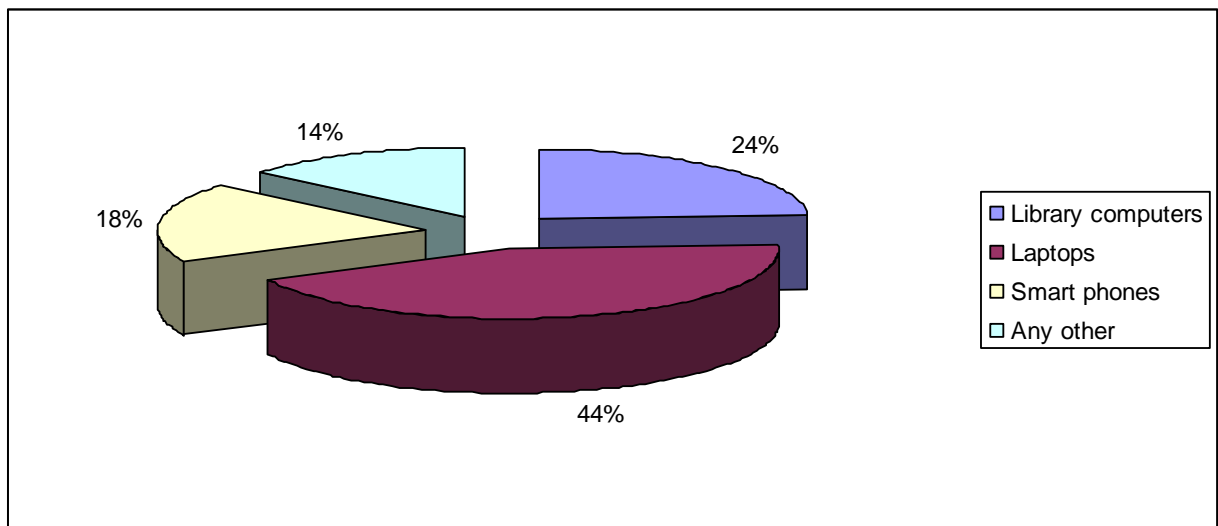


Figure 4.4: Devices used in accessing E-resources

Source: Field Data (2017)

4.3.2 Off Campus Access to E-resources

E-resources provided by KLISC are Internet Protocol authenticated. All respondents indicated that they were unable to access e-resources away from campus. This aspect was brought about by lack of softwares necessary to allow this kind of operation.

4.4 Adequacy of Training and User Support

To establish whether library staff possessed adequate skills in effective utilization of e-resources the researcher sought to establish whether they had ever been trained on ICT and in particular e-resources. The findings are indicated in Figure 4.5. Majority were trained at 72% and 28% had not been trained. This data was important because librarians are ideally supposed to train post-graduate students and other library users on access and use of e-resources and training is of paramount importance.

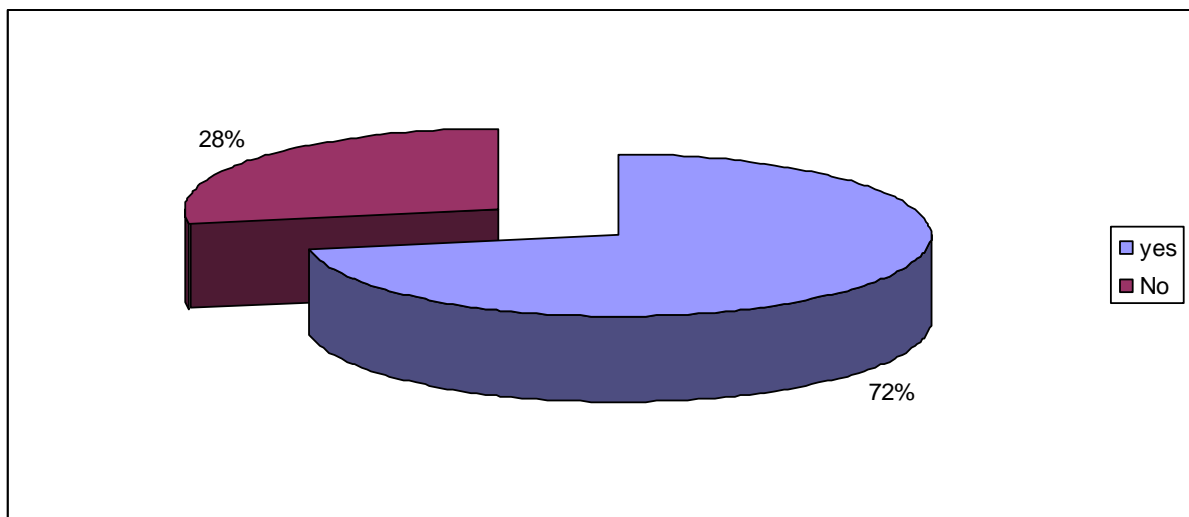


Figure 4.5: Staff trained on E-resources

Source: Field Data (2017)

The respondents indicated that training on access and use of e-resources was conducted by KLISC through workshops, publishers of e-resources, trainers of trainers, online courses

from contracted companies and so on. This information was necessary to the researcher because it would explain why not every library staff was involved in the training of post-graduate students in Laikipia University as indicated in table 4.6 below.

Table 4.6: Library staff involved in e-resources training

Training	No.	Percentage (%)
Yes	7	41
No	10	59
Total	17	100

Less than half of the respondents at 41% indicated that they were involved in e-resources training despite their skills not being adequate. The reasons below were pointed to as the contributing factors to the inadequacy;

- a) Publishers changes user interfaces frequently
- b) Technology is dynamic and keeps on changing
- c) Connectivity to the internet is not always guaranteed
- d) Lack of enough computers in the library
- e) Lack of expertise in relevant ICT areas such as web design, advance internet user and so on.

Over half of the respondents at 59% indicated that they never participated in e-resources training to the post-graduate students in the institution. The following reasons were indicated as contributing factors;

- a) Very few had ever been trained by KLISC
- b) Those trained rarely imparted the same knowledge to fellow colleagues
- c) Technophobia was also a contributing factor

All respondents indicated that KLISC does not provide technical support. This information was necessary because it would have an impact on the overall efficiency on the part of the consortium.

Okello-Obura (2010) found that, for students to utilize the growing range of electronic resources they must acquire and practice the skills necessary to exploit them. The study established that more than half at 59% had had training on access and use of e-resources and less than half at 41% as represented in Figure 4.6 shows that they had not been trained at all. This information is important because it will indicate the reasons why e-resources are not maximally used by post graduate students in this institution.

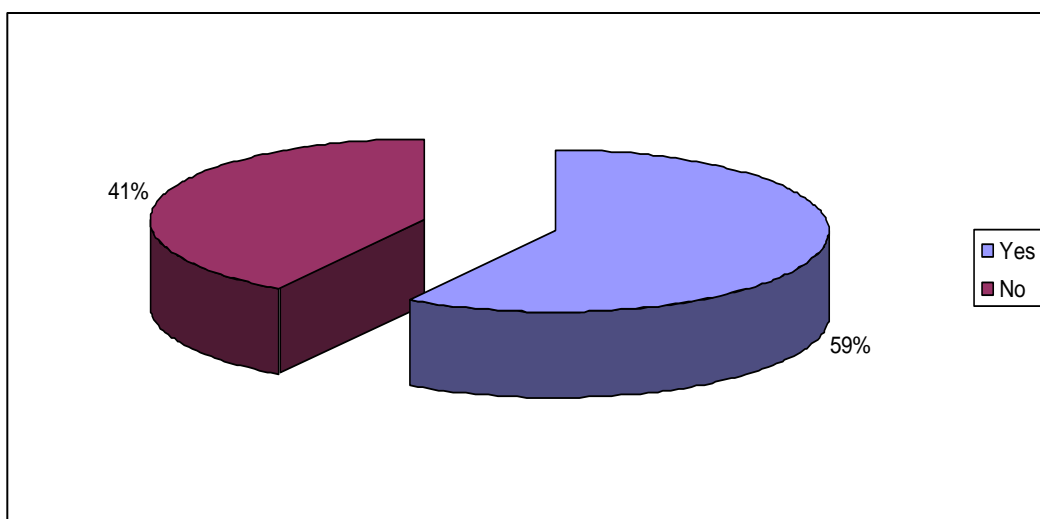


Figure 4.6: Post-graduate training on access and use of e-resources
Source: Field Data (2017)

To find out the most commonly used mode of e-resource training to post-graduate students in Laikipia University, the researcher found out that 67% of respondent were trained through library training sessions as indicated in table 4.7 Library orientation also plays a major role in e-resources training at 58%. 36% of respondents indicated that seminars, workshops and conferences were equally vital in imparting knowledge on access and use

of e-resources. 12% learnt the skills through social media. A small number of respondents at 9% indicated self initiative as a mode of training.

Table 4.7: Mode of e-resources training (Multiple Responses)

	Mode	Respondents	Percentage (%)
i)	Library orientation	108	58
ii)	Library training sessions	124	67
iii)	Seminars/ workshops/conferences	66	36
iv)	Social media (Twitter, Whatsapp, Face book etc)	23	12
v)	Online (Webinar, Webconferece)	12	6
vi)	Brochures, Newsletters ,Manuals	56	30
vii)	Lecturers	20	11
viii)	Friends and colleagues	27	15
ix)	Any other	16	9

4.5 Ease of Use of E-resources

Okello-Obura (2010) in his study noted that the advantages of electronic resource over printed ones include speed of access, ease of use among others. The study sought to establish ease of use of e-resources provided by KLISC, the researcher wanted to find out factors that users consider as hindrances to successful use of e-resources. Figure 4.7 indicate user interfaces was found to be a major problem at 78%. Downloading of full text

documents was at 73% while saving of the downloaded documents was found to be an obstacle at 61% respectively.

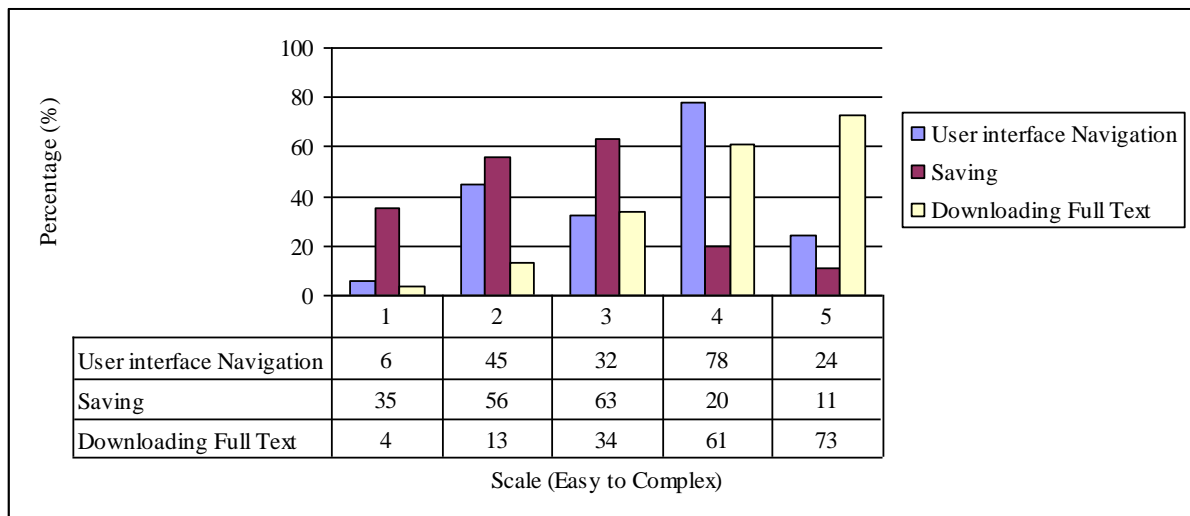


Figure 4.7: Hindrances on ease of use e-resources provided by KLISC

Source: Field Data (2017)

4.6 Challenges of Using E-resources Provided by KLISC

To establish whether post-graduate faced challenges in accessing and using e-resources from the consortium, respondents indicated that 63% had challenges while 37% said they had no problem in utilizing these resources as shown in Figure 4.8 The researcher felt that there could be challenges facing post-graduate students in Laikipia University.

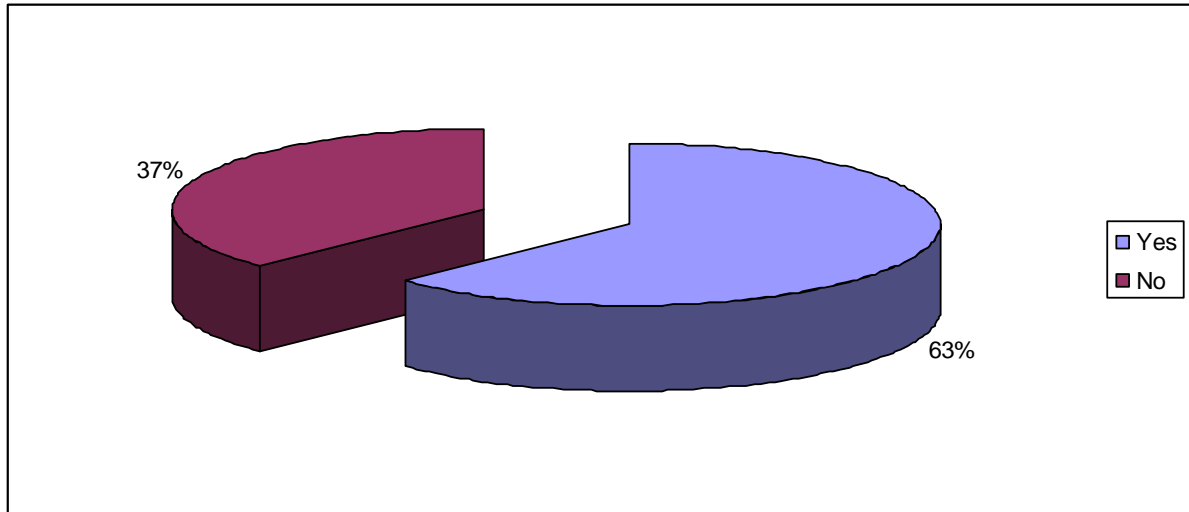


Figure 4.8: Respondents facing challenges in accessing and using e-resources provided by KLISC

Source: Field Data (2017)

The post-students were asked to indicate challenges they often faced while accessing e-resources while at campus. They were asked to choose between very often, often, always rarely and never. The findings were as shown in table 4.8.

Table 4.8: Challenges faced while accessing e-resources

Problem	Very Often (%)	Often (%)	Always (%)	Rare (%)	Never (%)	Total %
Lack of searching skills	34	57	2	3	5	100
Complex user interfaces	22	24	4	41	9	100
Insufficient resources	2	6	3	82	7	100
Connectivity problems	30	55	10	3	2	100

The research findings showed that more than half of the students were often affected by lack of searching skills. Finding of the study agrees with Khayesi (2005) that lack of information searching skills was the second major inhibitor to library use. This is a good point to start for library management to consider training these users on searching skills for efficient and effective utilization of e-resources. However less than half of the

respondents indicated that complex user interfaces of publisher databases rarely affected them.

Majority of respondents indicated that they were able to search KLISC databases and get results. This aspect is an indicator that KLISC resources are rich in information resources sought by post-graduate students in this institution. This finding is in tandem with Chia-Chen Chen (2014) findings that indicated that people are increasingly doing more of their reading and information gathering on computers rather than in printed books due to rapid development of information technology and near-universal access to the Internet.

A significant number of respondents indicated that connectivity problem was oftenly experienced. Internet connectivity is imperative in accessing electronic resources from KLISC. The researcher found it necessary to find out whether the available internet connectivity was reliable for use in searching and retrieving electronic resources from e-resources provided by KLISC.

The respondents additionally indicated the following challenges.

- i) Lack of enough computers hampered their accessing information resources
- ii) Absence of Off Campus access capabilities
- iii) Lack of space in the resource center
- iv) Wifi connectivity coverage is limited to some areas in the library
- v) Limited power sockets for charging laptops, smart phones, ipad and other devices also affected use of e-resources.

Library staff equally indicated the following challenges while accessing and using e-resources from KLISC.

- i) Lack of sufficient information on access and use of e-resources provided by
KLISC
- ii) Most articles are only accessible upto abstract levels despite the same being
subscribed to by their library,
- iii) Complex method of accessing usage statistics

4.6.1 Suggestions to Enhance Provision of E-resources Subscribed to by KLISC

To elicit the respondents' contribution to enhance access of e-resources utilization, they were asked to give own suggestions. Respondents in both categories indicated the following actions geared towards enhancement of efficient use of e-resources provided by KLISC to its members.

- a) Post-graduate students should be taught information searching skills in their first
year of study.
- b) Information literacy (IL) skills be integrated into the academic program in every
level of education that is under-graduate and post-graduate levels
- c) The library should establish fully networked resource centers and improve Wifi
connectivity.
- d) Lecturers ought to insist on students using e-resources in their assignments

Respondents in the category of library staff additionally indicated the following in
enhancing KLISC services to its members

- i) Adopt social media like Facebook, Twitter and WhatsApp in engaging it members
on emerging issues

- ii) Buying space in mainstream media for its marketing and promotion activities
- iii) Invite lower cadre staff in annual fair where papers are presented to give new ideas
- iv) Reward institutions with the highest number of download of e-resources provided by KLISC in order to encourage usage of e-resources.
- v) Allow for off-campus access to e-resources will greatly enhance their usage
- vi) Developing online help and feedback.

4.7 Relevance of E-resources Provided by KLISC

In order to establish whether the post-graduate students in Laikipia University used e-resources from KLISC in meeting their academic and research needs, majority of respondents at 84% indicated that they actually used them for their academic as well as for their research purposes. However 16% indicated that they were not able to use these resources and shown in figure 4.9.

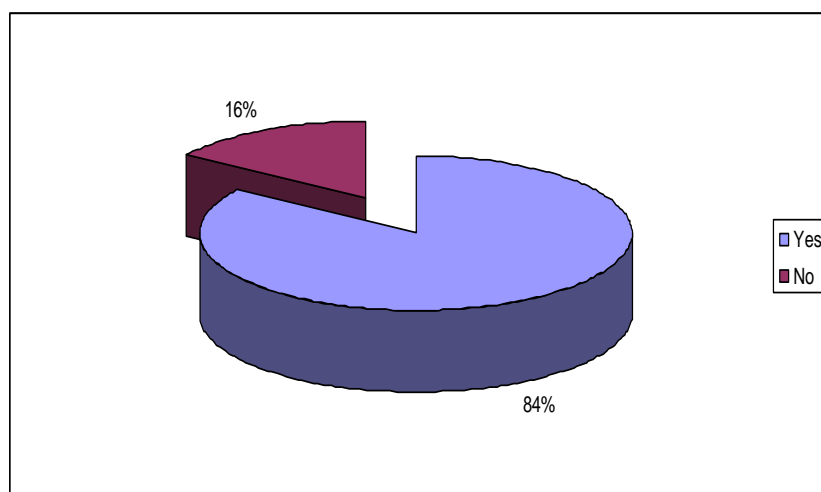


Figure 4.9: Relevance of e-resources in meeting Post-Graduate Students academic and research needs

Source: Field Data (2017)

The respondents indicated the following reasons on their preference in using e-resources provided by KLISC;

- a) Ability to access information outside the library
- b) The e-resources contains up to date information on topical issues
- c) Easy for citation purposes
- d) Cross checking information from several sources is possible.
- e) Reduces paper work

The findings of this study concurs with Okello-Obura (2010) that the advantages of electronic resources over printed ones includes the capability to search multiple files at the same time and the ability to access documents from outside the library among others.

Respondents who indicated that they never found e-resources provide by KLISC relevant indicated that, they were never referred to by their lectures and that e-resources were not part of the reading list given by their tutors.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the main findings, conclusions made from the findings, and recommendations. It also includes suggestions for further study. The summary is provided with reference to the aim, objectives, research questions and assumptions. The aim of the study was to determine the efficiency of Kenya libraries information services consortium in provision of e-resources in academic libraries: case of Laikipia University. The study was based on the following specific objectives: to ascertain adequacy of training offered by KLISC towards utilization of e-resources by library users; to establish marketing approaches employed by the consortium in promotion of e-resources; to identify challenges faced in utilization of e-resources provided by KLISC to its members and to find out views on relevancy of KLISC products and services in meeting users needs in academic libraries.

5.2 Summary and Discussions of the Main Findings

The study findings were guided by the objectives and research questions of the study.

5.2.1 Lack of Sufficient Skills

ICT skills play a major role in the provision of electronic resources. The findings in figure 4.1 indicated that only 17% of respondents in the category of library staff and 15% of respondents in the category of post-graduate students in figure 4.2 had advanced ICT skills. This aspect signifies that utilization of e-resources may not be fully realized especially where application of advanced searching strategies are required.

5.2.3 Promotion and Marketing of E-resources by KLISC

The findings in table 4.3 indicated that 39% of respondents happened to be aware of services and products of the consortium through emails and social media (Facebook, WhatsApp, Twitter, Instagram etc). The researcher found a disconnect by KLISC in application of modern advertising methods. Social media applications are faster, efficient and have multimedia capabilities. Social media appeals to the young and old in equal measure and KLISC should try out this technology marvel in modern advertisement in marketing their products and services to target population.

5.2.4 Adequacy of Training and User Support

The study found that the training being offered by KLISC during workshops and seminars was not sufficient enough and there was need to improve the training. The training need to be intensive especially for library staff involved in the day to day training of library clients and in particular post-graduate students on access and use of electronic resources. The researcher found that 41% of the post graduate students had not had training on access and use of e-resources as indicated in figure 4.6. This aspect implies that close to half of the library users may not effectively use resources from the consortium. Libraries should be involved in spearheading teaching of Information Literacy (IL) at faculty level as a common course to all students irregardless of their levels of education. From the findings of the study, it was also clear that there was need to develop a curriculum for training library staff who are in turn expected to train the end users of e-resources as well.

5.2.5 Ease of Use of E-resources

The researcher found out that navigation of user interfaces of publishers' databases was a major hindrance at 78% in ease of use of e-resources as indicated in figure 4.7. The study

further established that 63% of post-graduate students had challenges in efficient use of e-resources as indicated in figure 4.8. To overcome this challenge associated with user interface navigation a common and a simple user interface can be developed by KLISC or by individual member library. A Google custom search, which is a freeware, can be embedded on library WebPages to enable searching of resources from one simple search box. An off campus access to e-resources from KLISC can be deployed as well to enhance ease of use. Off campus access will ensure that library clients continue to access these resources beyond normal library operations as well as away from the library precincts.

5.3 Conclusions

The purpose of this study was to establish efficiency of Kenya Libraries Information Services Consortium (KLISC) in provision of e-resources in academic libraries. This study has resulted in three main conclusions.

Firstly, utilization of e-resources provided by Kenya Libraries Information Services Consortium may not be fully realized because of lack of ICT skills by a majority of library users. This may lead to wastage of finances if efficient and effective methods access and uses of e-resources are not developed and taught through training.

Secondly, to enable ease of use associated with e-resources from the consortium, a common user interface can be developed linking all subscribed to resources provided by KLISC. A simple search box can resolve challenges associated with user interface navigation. Advanced search strategies such as Boolean searches which are cumbersome and complex to use can be resolved by adopting Google custom searches in searching multiple databases at once.

Finally, regarding promotion and marketing of products and services provided by KLISC to member libraries, modern advertising methods should be engaged. Social media can network and connect the society in a big way. It is a cheap way and can equally provide a two way communication channel for KLISC, member libraries and library clients.

5.4 Recommendations

From the findings of the study, it is clear that there are areas which KLISC needs to develop a different approach in order to improve its efficiency in the provision of electronic resources to member libraries and in particular academic libraries.

- i) Members of the consortium should organize training program for the faculty members particularly the academic libraries in a bid to promote e-resources for teaching and research.
- ii) There is need for KLISC to develop online training sessions to all members.
- iii) To enhance modern technology to its members, KLISC can partner with donors and relevant bodies to enhance new technology.
- iv) Implementation of a working ICT infrastructure.
- v) To improve efficiency on KLISC service delivery, a mechanism should be found to bill institutions based on statistics on full text downloads.
- vi) There is need for KLISC to look for possibility of authenticating its members using other methods such as usernames and password instead of solely depending on IP addresses.

5.4.1 Recommendations for Further Research

This study looked at the efficiency of Kenya Libraries Information Services Consortium in provision of e-resources in academic libraries. Further investigation should be done on the following areas:

- i) Factors affecting academic staff in universities from utilizing e-resources from Kenya Libraries Information Services Consortium (KLISC).
- ii) A study to establish challenges of e-resources on modern learner
- iii) A study should be conducted on the possibilities of establishing an academic consortium in Kenya

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APPENDIX I: Questionnaire - Post Graduate Students

Introduction

I am a student at Kenyatta University pursuing a Masters Degree in Library and Information Science (MLIS). I am conducting a research survey entitled: **Efficiency of Kenya Libraries Information Services Consortium in provision of e-resources in academic libraries: case of Laikipia University library**. You have been identified and selected to participate in this study. Kindly fill the questionnaire as adequately as possible. The information submitted will be used for research purpose only. All answers will be held in confidence and will not be used in any way against the respondent or the institution. The questions will take only a few minutes to complete.

Thank you.

Andrew Kimanga Njuguna

Reg. No.: E65/OL/NKU/24159/2014

Instructions: Please Tick (✓) or give comments where applicable.

A: RESPONDENT'S DETAILS

1. Gender

i) Male

ii) Female

2. ICT proficiency

i) Basic

ii) Average

iii) Advanced

B: PROMOTION OF E-RESOURCES

3. a) Are you aware of e-resources subscribed to by your library

i) Yes

ii) No

b) If yes, how did you know about them? through (You can tick even more than one)

- i) Library orientation
- ii) Lecturers
- iii) Friends and Colleagues
- iv) Library training sessions
- v) Seminars/ workshops/conferences
- vi) Through Training manuals
- vii) Posters
- viii) Notice boards
- ix) Any other please indicate:.....

c) If No Please give reasons

- i).....
- ii).....
- iii).....

d) How often do you use the e-resources

- i) Daily
- ii) Weekly
- iii) Monthly
- iv) Rarely

4. Which gadget do you use in accessing e-resources?

- i) Library computers
- ii) Laptops
- iii) Smart phones
- iv) Any other

5. a) Do you access e-resources off campus

- i) Yes
- ii) No

b) If yes how do you access them?

- i) Through user names and passwords
- ii) Through authentication software
- i) Any other please specify.....

C: ADEQUACY OF TRAINING AND USER SUPPORT

6. a) Have you ever been trained formally on use of e-resources subscribed by your library?

- i) Yes
-

ii) No

b) If yes, how were you trained? (You can tick even more than one)

- i) Library orientation
- ii) Library training sessions
- iii) Seminars/ workshops/conferences
- iv) Social media (Twitter, Whatsapp, Face book etc)
- v) Online (Webinar, Webconferece)
- vi) Brochures, Newsletters ,Manuals
- vii) Friends and colleagues
- viii) Any other

D: EASE OF USE OF E-RESOURCES

7. How easy is it when utilizing e-resources subscribed by your library? (Where 1 represent easy and 5 complex)

	Item	1	2	3	4	5
a)	User interface Navigation					
b)	Saving					
c)	Downloading Full Text					

E. RELEVANCY OF KLISC PRODUCTS AND SERVICES

a) Do you use e-resources in your library to meet your academic needs?

- i) Yes ii) No

b) Please indicate your reason below

.....
.....
.....

F: CHALLENGES OF USING E-RESOURCES (Where applicable you can tick even more than one answer)

8. a) Do you face any problems when accessing e-resources subscribed through KLISC?

i) Yes

ii) No

b) If yes what problems do you face and how often.

S/No.	Problem	Very Often	Often	Always	Rare	Never
i)	Lack of searching skills					
ii)	Complex user interfaces					
iii)	Unable to understand technical terms used					
iv)	Connectivity problems					

c) Any other please specify

i)

ii)

iii).....

9. Kindly give (if any) suggestions on what you think can be done to enhance access to

e-resources subscribed to by KLISC

.....
.....
.....

Thank you for taking time to complete this questionnaire. Thank you.

Contact: anjuguna2030@gmail.com

APPENDIX II: Structured Interview Schedule - Library Staff

Introduction

I am a student at Kenyatta University pursuing a Masters Degree in Library and Information Science (MLIS). I am conducting a research survey entitled: **Efficiency of Kenya Libraries Information Services Consortium in provision of e-resources in academic libraries: case of Laikipia University library.**

I am kindly requesting for your participation in responding to the interview questions posed as adequately as possible. The information gathered will be used for research purpose only. All answers will be held in confidence and will not be used in any way against the respondent or the institution. The session will take only a few minutes of your time. Thank you.

Andrew Kimanga Njuguna

Reg. No.: E65/OL/NKU/24159/2014

1. Have you ever been trained on use of E-resources
 - i) If yes who were involved in the training?
2. Are you involved in training of the users on utilization of E-resources by KLISC
 - i) If Yes, are the skills adequate?
 - ii) If No kindly give reasons
3. How do KLISC market its products and services to your library?
4. Does KLISC provide technical support in accessing E-resources?.
5. What difficulties do you face in accessing and using the E-resources?
6. In your opinion, what should be done to make KLISC serve its members better?

Thank you for taking time to complete this interview session.


APPENDIX III: Time table

	January - February 2017	March - May 2017	June - August 2017	September - October 2017	November 2017
Proposal writing					
Submission for approval					
Data collection & analysis					
Report writing					
Research Project submission					

APPENDIX IV: Budget

Description	Unit Cost(KShs)	Sub Total Cost (KShs)
1. Typesetting <ul style="list-style-type: none"> • Proposal • Instrument • Report 	1,500.00 500.00 3,000.00	5,000.00
2. Photocopying <ul style="list-style-type: none"> • Proposal & Binding • Instrument • Report & Binding 	2,000.00 3,000.00 5,000.00	10,000.00
3. Stationery <ul style="list-style-type: none"> • Laptop (Hp) • Modem (Safaricom) • Internet Bundles (Safaricom) • Flash Disk (8Gb) • Writing materials & pens 	40,000.00 4,000.00 5,000.00 1400.00 600.00	51,000.00
4. Other Expenses <ul style="list-style-type: none"> • Research Assistant • Traveling • Accommodation • Miscellaneous 	15,000.00 6,000.00 4,000.00 5,000.00	30,000.00
TOTAL		96,000.00

APPENDIX V: KENYATTA UNIVERSITY RESEARCH APPROVAL


KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke P.O. Box 45844, 00100
Nairobi, Kenya
Tel. 812901 Ext. 4130

Website: www.ku.ac.ke

Internal Memo

FROM: Dean, Graduate School DATE: 11th September, 2017

TO: Njuguna Andrew Kamanga REF: DGS/GR/REG/24179/2014
C/o Library & Information Science Dept.


SUBJECT: APPROVAL OF RESEARCH PROPOSAL

We acknowledge receipt of your revised Research Proposal as per our recommendations issued by the Graduate School Board of 7th June, 2017 entitled "Efficiency of Kenya Libraries Information Services Consortium in Provision of E-resources in academic libraries: Case of Laikipia University Library".

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage www.ku.ac.ke.

Thank you.


ANNELL MWANGI
FOR DEAN, GRADUATE SCHOOL

Cc: Chairman, Department of Library & Information Science


Supervisors:


1. Dr. Peter G. Mwangi
C/o Department of Library & Information Science
Kenya University

NACOSTI PERMIT

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REPUBLIC OF KENYA



**National Commission for Science,
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**RESEARCH CLEARANCE
PERMIT**

THIS IS TO CERTIFY THAT:
MR. ANDREW KIMANGA NJUGUNA
of **KENYATTA UNIVERSITY, 0-20115**
EGERTON, has been permitted to
conduct research in **Laikipia County**

on the topic: **EFFICIENCY OF KENYA
LIBRARIES INFORMATION SERVICES
CONSORTIUM IN PROVISION OF
E-RESOURCES IN ACADEMIC LIBRARIES:
CASE OF LAIKIPIA UNIVERSITY LIBRARY**

for the period ending:
12th October, 2018

Permit No : NACOSTI/P/17/88693/19457
Date Of Issue : 12th October, 2017
Fee Received : Ksh 1000



.....
**Applicant's
Signature**

.....
**Director General
National Commission for Science,
Technology & Innovation**

APPENDIX VI: Turnitin Originality Report

Turnitin Originality Report



EVALUATION OF KENYA LIBRARIES INFORMATION SERVICES
CONSORTIUM IN PROVISION OF E-RESOURCES IN ACADEMIC LIBRARIES:
CASE OF LAIKIPIA UNIVERSITY LIBRARY by Kimanga Njuguna Andrew

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[Library Management, Volume 23, Issue 4 \(2006-09-19\)](#)

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[Ana Maria Balenbin Fresnido, Joseph Marmol Yap. "Academic library consortia in the Philippines: hanging in the balance", Library Management, 2014](#)

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<http://icolc.net/about-icolc>

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<http://www.kenyalibraryassociation.or.ke/index.php/our-partners/kenya-library-and-information-services-consortium>

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[Clayton Garthwait, Elizabeth A. Richardson. "LibQUAL+™ in a consortium: KLN's challenges and considerations", New Library World, 2008](#)

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[Ganiyu, Oluwaseyi Quadri, Edale Adetimirin Airen, and Adebayo Idowu Oluwafemi. "A study of availability and utilization of library electronic resources by undergraduate students in private universities in Ogun State, Nigeria", International Journal of Library and Information Science, 2014.](#)

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<http://www.library.yale.edu/consortia/2001pressreleasebathprofile.htm>

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<http://klisc.org/node/16?mini=2014-02>

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[Hormia-Poutanen, Kristiina Xenidou-Dervo. "Consortia in Europe: describing the various solutions through four country examples.", Library Trends, Wntr 2006 Issue](#)

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EVALUATION OF KENYA LIBRARIES INFORMATION SERVICES CONSORTIUM IN PROVISION OF E-RESOURCES IN ACADEMIC LIBRARIES: CASE OF LAIKIPIA UNIVERSITY LIBRARY NJUGUNA ANDREW KIMANGA

E65/OL/NKU/24159/2014:

15 SCHOOL OF EDUCATION A research project

submitted in partial fulfillment of the requirements for **the degree of**

Masters in Library and Information Science in the Department of **33 Library and**

Information Science, Kenyatta University **OCTOBER 2017**

ABSTRACT Consortium building by **libraries** underpins their existence in the current

world of information Communication and Technology (ICT). The