

Challenges and Opportunities in the Use of Information Communication Technology in Management of Government Libraries: A Case Study of Kajiado County – Kenya

Ramadhan Sifuna Rajab¹, Dr. James Ogalo²

Seniour Librarian Umma University

Abstract: *The use of Information communication technology in the library management has become widely applied to almost all the services rendered by the library. It has gradually brought a revolutionary progress in the field of Librarianship. Technology has totally changed how the library discharge the services to the clients and all aspect of library management has also changed including acquisition of information sources, processing, storage, preservations and dissemination of the information resources to the library users. It has greatly contributed to the efficiency and effectiveness of service delivery of the library. The management of the library, staffs and users no longer waste a lot of time searching for the desired information sources, they retrieve just with a click of a mouse. The study was carried out to examine the challenges and opportunities of using the information communication technology in the management of Government libraries, in Kajiado County-Kenya which is one of the 47 counties in the country with a view of coming up with the solutions to solve the existing challenges and enhance the access and usability of the e-sources in the library. The objectives laid down on this research were, to find out the effect of system usability on speed and ease retrieval of information resources, to determine the effects of training and skills on accessibility of electronic information sources, to establish the components of information communication technology Infrastructures and its development and to establish the challenges and opportunities of using the Information Communication Technology in the management of information sources in library. The study changed into knowledgeable by using Diffusion of Innovation (DOI) theory. The study used descriptive research layout with a target population of library staffs and users. Questionnaire was the instrument used to collect data from the respondent purposively decided on. Data was analyzed using qualitative and quantitative techniques. The findings indicated that the use of information communication technology in the library management has both the challenges and opportunities. The challenges were High cost of installation of information communication technology, lack of know-how.*

Keywords: Library management. Digital library

1. Introduction

The ever increasing number of information generated by the organizations both the government and private sectors and difficult in having informal, personal communication and large geographical distance involved in certain routines of information materials acquisitions, the urge to use modern developments in the related fiends of electronics, computers and telecommunications, the increasing role of information in shaping the economy of the society are some of the factors that have rooted the use of ICT in the management of a modern library. The change narrative of information from something to know to something to have as any other commodity have resulted to need for improving the information services in the library (A Lakshmana \$ C.R Karisiddappa, 1996). The applications of information communication technology have raised the efficiency and effectiveness in the library services in acquisition of information materials, processing, storage, retrieval and dissemination of the same. More libraries around the globe have automated their services to make them efficiency and effective in meeting the patrons needs. The discovery of the World Wide Web has gradually changed the way the library delivers the services to the users and even the users are consequently capable of access up to date global literature as quickly as it's miles posted on the internet by click of the mouse. Libraries being the reservoirs of information materials they have not been left behind to adopt the use of ICT in its endeavors because the medium of information

resources have also changed. Library users are no longer relying on print materials only, they prefer the use of electronic information materials which seemed to be more easily accessible than print materials which requires one to move into the physical library so as to use the materials. In the last couple of years, users/researchers in government institutions have increasing demand and preferred access to electronic sources delivery and networked information from their respective libraries (Covi and Cragin, 2004). Accessibility to internet is the major advancement in the current eror. It is centered at the helm of advancements in the Technology (ICT) which has gone a long way to influence the mode of information management Internet access is used for electronic in online communication, e-commerce, social Medias among others (Akintunde, 2006). Therefore, the product of this are increased access to timely, accurate, relevant and current information in most ICT compliant libraries all over the world. However, those libraries have been hampered with the aid of many constraints to embark on a success application of information communication technology for their operations, sources, and services (Williams, & Channa veeraiah, 2008).Some of the challenges hampered the use of ICT in the library is low utilization levels of e-sources among library users. This is in spite of the efforts made by the library staffs to conduct the information literacy to the users, provisions of current awareness services on availability of electronic resources and how to access the information in the electronic sources. Also the library some library staffs don't

have the requisite knowledge and skills on using the information communication technology which render him/her obsolete to assist the library users on the same, as a result, this study intended to establish the challenges and opportunities in the use of information communication technology in the management of County government library.

2. Statement of the Problem

County Governments have established libraries as one of their key department in their administration to support a continuous need for development and provisions of research information materials consistent and in support of achieving their aims, Visions, mission, and objectives set. The library has the mandate of selecting, acquiring, processing, storage and dissemination of relevant and up-to-date information resources to the library users. Due to rapid phenomenon advancement of using information communication technology to the management of libraries have revolutionized ways of providing services including digitization of information materials and provision of online services including dissemination of information materials. The technology has given the library users some good opportunities to access and use the accurate, timely and relevant information resources. The thriving growth of electronic publications has also reshaped the nature of data collections and the mode of delivering, accessing, usage of the information and the rate of production of electronic information materials has exceeded that of print-based publications

(Dolgeish, & Hall, 2000) A number of opportunities and challenges of using information communication technology in the management of library has been realized which include and not limited to: information being available as soon as it is needed without wasting a lot of time in searching unlike print media, remote access by the users who are not able to access the physical library due to geographical distance and cost of travelling, the information being available all in one place, and use of technology in the instructional to users. However, despite the massive investment that has been made on the implementations of technology in the library to aid in making the work efficiently. There are some of challenges faced by both the library staffs and the patrons. Those are, low level of accessibility and usability of E- sources among library users, in spite of the efforts made by the library staffs to conduct the information literacy to the users, Technostress both in library staffs and users. Lack of knowhow on how to use the technology gadgets by both the library staffs and users, as a result, this study intended to establish the challenges and the opportunities in the use of information communication technology in the management of County government library.

Overall objectives

General objective of this study was to evaluate the challenges and opportunities in the use of information communication technology in management of Government Libraries in Kajiado County-Kenya.

Specific Objective of the study

The study was guided by the following specific objectives.

- To find out the effect of system usability on speed and ease retrieval of information resources.
- To determine the effects of training and skills on accessibility of electronic information sources.
- To establish the components of information communication technology Infrastructures and its development
- To establish the challenges and opportunities of using the Information Communication Technology in the management of information sources in library.

3. Literature Review

Theoretical Literature

Theories are way by using which expectations approximately the world is generated; frequently they're derived from what we've got perceived to have happened before and for that reason they have an effect on how we set about destiny interactions with the arena

(Gill, & Johnson, 2002). This is considered as a conceptual version of how one theorizes or more makes logical sense of the relationships amongst several factors which have been identified as essential to the hassle. these thoughts and theories are then grouped together into themes that body the concern. Theories are regarded as a systematic explanation of relation amongst phenomena. It gives a generalized explanation of prevalence. It debts for and explains phenomena and it attempts to make clear why things/occasions are inside the way they may be based totally at the theories (Sekaran, 2003, Kombo & Tromp, 2006). They discuss the interrelationships a number of the variables which can be deemed to be quintessential to the dynamics of the situation being investigated. The case study turned into informed through Diffusion of Innovation (DOI) principle developed through (Rogers, 1962).

Relevance of the Theories to this Study

Theories serve to provide a better understanding of the challenges and the opportunities of using digital information sources in the library by the staffs and levels of expert development in users. Effective interaction depends on each device usability and data usefulness to the library patrons performing their duties successfully, efficaciously and competently for the ultimate improvement of offerings. Those theories show their usefulness in enhancing powerful utilization of e- sources. (Stephens, 1989) observed that the desire to feature to one's stock of know-how from what others already realize, the hunt for statistics or 'intelligence, is a function of students and customers of all times. Today's world suffers from data overload. With so much information to be had, it is important for humans to realize how to locate the right and applicable records which could assist them to remedy their data desires. The skill of getting access to and use of those substances is very essential to the users so as avoid more embarrassment and use minimal time in using the digital contents.

Diffusion of Innovation Theory

Diffusion of Innovation (DOI) theory, evolved via E.M. Rogers in 1962 is one of the oldest social technology theories. Diffusion of innovations is an idea that seeks to give an explanation for how, why, and at what fee new thoughts and technology unfold via cultures. The diffusion manner, however, signifies a set of phenomena, which indicates how an innovation spreads among clients.

Rogers described this theory as extensively used theoretical framework within the location of era diffusion and adoption (Stuart, 2000) He in addition defines diffusion as “the manner in which an innovation is communicated through certain channels over the years many of the contributors of a social system. (Rogers, 2003) expressed on this concept that there are 4 essential factors that have an impact on the spread of a brand new idea: the innovation, communication channels, time, and a social gadget is predicated closely on human capital. He had positioned the subsequent description of an innovation: “An innovation is a concept, practice, or project this is perceived as new by using an individual or every other unit of adoption” (Rogers, 2003). Adoption is a person technique detailing the series of degrees one undergoes from first hearing approximately a product to ultimately adopting it.

Humans using libraries and records systems to find out about a specific difficulty or to research a hassle or problem often have issue inside the early tiers of facts looking for. even when they start with top notch enthusiasm and preliminary success, many end up stressed and unsure as to a way to continue after a brief time period. Within the fee of adoption, there's a factor at which an innovation reaches. This is a factor in time in the adoption curve that the range of person adopters guarantees that endured adoption of the innovation is self-maintaining. The innovation must be broadly adopted with a purpose to self-preserve. This theory informed the study.

Empirical Review

The empirical review explores literature related to the hassle beneath the study. The segment is categorized in keeping with the target that allows you to ensure relevance to the research hassle. The ever increasing information need of the users resulted to large group of users and difficult in having them informal, the large geographical distances involved in selecting, acquisition of information sources and the urge by the information centers to apply the modern technology in their daily services has narrowed to the application of information technology in the library operations ((Tiefel, 2004) Government institutions and libraries have not been left out in this new technological advances.

The government has put into the consideration the significance of the library which plays a critical role in attaining and achieving the objective of the government mission and goals and invested in a lot. As the information is the wheel of any organization, the library plays important role of selecting, organizing, processing, storage, preservations and disseminations of information materials

It's too unfortunate that majority of the library users are not able to locate, access and retrieve the information resources which are in electronic sources or some even are not aware of their existence and their qualities (Tiefel, 2004) they face a lot of problems while browsing through the information sources and majority depends to the information professionals to retrieve the needed information resources. The pose a major challenge of using the information communication technology in the modern libraries. However, the application of information communication technology in the library management raises the efficiency of library services in that, it provides access to very large information collections, support publishing, annotation and integration of new information and high band with computer networks supporting efficient multimedia document transfer ((Tiefel, 2004)

Strategies adopted for easy accessibility, and usability of E-sources

Information resources in the library are meant to be used by the users to satisfy their information needs. It's the duty for the library management to ensure that each information sources get its reader or user. (Ranangathan, 1996) suggested that each information materials or a book should get its user. While using the information communications technology in the management of information sources is very challenging to both the library management and the library users, The authority should be in a position to ensure that library staffs are able to use the available information communication technology to be able to castigate the knowledge and skills to the clients to ensure maximum utilization of the e sources in the library without facing much problems, the creation of current awareness is paramount. Users should be introduced to the assets and shown on how to operate them.

This will help them to satisfy their information needs easily without facing much problems

Through the programme of information literacy (Pejova, 2006) A number of libraries have adopted the method such as the use of instructional labels, placed in front or sideway of the machine has been proved effective because users are able to read the instructions and be in positions to work on their own without being embarrassed and seen as they are technology dwarfs. Exposure to the merging technology by both the staffs and users is vital in that it enables them to be in a position to make use of the technology.

The library staffs should also fully possess the knowledge and skills on using the information communication technology to enable them manage the electronic information technology efficiently and effectively. They should shun away from depending on the manual equipment's, for instance the use of card catalogues to the use of online catalogues (Dai et al, 200).The subscription by the libraries to the National consortium has helped many libraries to overcome the challenges of minimal accessibility and usability of electronic sources, this has enabled the users to access the wide variety of information sources from one point through a click of a mouse. This has also enabled the

libraries to easily manage to acquire and archive the electronic sources easily and effectively

Provision of Information Literacy on using the e-sources in library

Library should be in a position to provide the information literacy to its users so as they know what they are supposed to do and what they should avoid. The information literacy helps the library users to make use of maximum resources maximally by being in position to access, evaluate and making use of them. The library should have in place the proper information literacy policy and information communications technology policy to guide and direct the process. It should have the expert entitled to formulate and implement those policies and be able to castigate to other stake holders like the library management and staffs. (Karjalainet al, 2000)The need for librarian's savvy is extra than ever (Al-Qallaf, 2006) observed that training and getting to know activities are an important element of technological adjustments. The new technology changes day in day out which requires both the staffs and the clients to have updated knowledge on how to make use of them. Study carried with the aid of Al-Qallf revealed that 74.5 % of the respondents regarded forward to gaining knowledge of new technology (Jones, 1999) located that staff training is a persevering with want that's once in a while noted as a morale builder, assurance of competence, and good way of creating the photo of a nicely planned library whose team of workers are experts in various area and are serviced oriented, they will expand this expertise to the users of the library so as to become acquainted with the machine.(Poole, \$ Deny, 2001) researched on community university library staff and observed out that too little training on generation increased process strain, and best 25p.cof the respondents expected to analyze too many things too speedy. (Jones, 1999) in addition speculated that supervisors had become overloaded with paintings, ensuing in a bad belief in their training capacity.

Components of information communications infrastructures and its development

Information communication infrastructure that is the technical and human foundations, on which the business applications can run. (Weill and Broadbent, 200) describes an IT infrastructure as the basis for the planned IT capacities (Technical as well as human), which are shared resources in affirm via reliable services and mostly managed by the information systems and technology group and the firm. They consist of computers and information communications technologies gadgets. They are used and transformed the meaningful services via its human IT infrastructures, which contain knowledge skills and experience.

Each and every IT infrastructures has its opportunities and the limitations. Some of the limitations may related to interactions with other components for instance the different standards of components may not fit to the other. Also the information system personnel may lack knowledge and skills to operate the machines; also he/she may lack means to install the system. Another limitation is that the library may lack the services required to have new components. The IT infrastructures elements fit well with each other. According to

(Weill and Broadbent 2000), IT components (software, hardware and middleware, networks) can be used by skillful people to function effectively to realize its objectives such as data managements in the libraries and to facilitate the and the services management communications.

While implementing the IT system in the organization, the infrastructures should fit well with the system expected to support for instance the circulation and processing of the information materials in the library. The strategic information system requires that the IT infrastructure realizes a certain level of reach and range.

The information communication technology adopted in the library should also fit well with library strategy. It should support towards the accomplishment of the goals and the objectives set up.

Challenges of ICT use in the management of information sources

Inside the vicinity of lengthy-time maintenance of digital records, there are many unique issues closing to be solved. The problems challenge technical troubles which are brought by the physical mechanical of the gadgets. They are fond of braking down often, especially if they lack regular maintenance from the expert. The electronic information sources are more fragile compared to the print sources. They are prone to scrapping, blasting and even flammability. (Karjalain et al, 2000)

Technophobia: Most of the library users and even part of the staffs generally fears the loath any upcoming technology. They are may be lack of exposure or even healthy wise are not supposed to be exposed to the high frequency of magnetic elements which are produced by the machines which may lead to the unhealthy. The underlying reluctance against the common users of electronic media is generally the fear of getting the system scrubbed and seems to be in pivotal state of mind in most of the Kenyan libraries, librarians are comfortable in using the old traditions way of discharging their services. Even during the hands-on training of online and library automation, most of the trainees are not susceptible to training opportunity of handling electronic devices

The components of information communications technology infrastructures also pose the challenges related to the compatibility with its interactions with other components.

The technology fades away very fast and the existence of the hardware's and software's may be rendered obsolete due to incompatibility. (for instance, bringing in new information communication technology gadget to interact with existing one may fail due different features that may pose. (for instance the IS group may lack the knowledge, time, and means to install, maintain and manage the new technology) or the organization may lack the services required to have the new components or applications to run successfully such as, lack in processing capacity, a network with low band with qualities insufficient security measures, and lack of disaster recovery schedule.

Technostress: The use of information communication technology in the library management may lead to the physical strains by the user due to flare and glare of electronic operations. However, atmospheric factors are found to be more reactive and found to be unpleasant to health. RSI (Repetitive stress injury) which causes physical pain and apparent computer related stress. The supersession and overlapping of cutting edge technology trends for arresting high value of economy, has also been the vital factors for inherent reluctance. (Karjalain et al, 2000)

4. Importance of using Information Communication Technology in Library

Inter library loaning

The modernization of libraries and statistics facilities enabled records switch and get admission to, by means of establishes a network of libraries and data facilities. This initiative helped in resource development, aid sharing and their use at numerous levels. Records experts join e-journals, CD-ROM databases, on line databases, internet-based resources, and an expansion of different digital resources. They take part in library consortia and construct virtual libraries. but, these libraries had been hampered by using many constraints to embark at the successful utility of data and verbal exchange era (ICT) for their operations, resources, and services (Williams, & Channa veeraiah, 2008)

According to (analyze, data network 2009; 2011) institutions invest appreciably for providing users with the virtual literature they need for his or her work, with the idea that stepped

The growing acceptance of digital media has resulted in libraries inter alia gaining much more experience of their management.

Education: The use of information communication technology in the management of libraries aid in all types of education by use of electronic media. This may comprise of formal and informal educations, vocational and facilitations of distance learning for those who are not able to access the physical facility of the library (Berners-lee, 1973)

Entertainment: The Electronic media has transformed the way the libraries handle their services, it has brought total democratizations and transformations of the concept of entertainment. The entertainment reflects something of the psychic drives that lie deeper than immediately apparent demands of the market. (Malwad, 2009) said that it is not possible for an entertainment-led revolution to occur, but people want are willing to pay for entertainment industry. Hence entertainment has dominated tele video and leisure time of the people.

5. Methodology

Research Design

Researcher adopted both qualitative and quantitative approach (mix) methods to conduct the study. This assisted researcher in describing the situation explored and

understood the meaning and the characteristic of the phenomenon under investigations. (Poovalingam and Docrat, 2011). With reference to the study, the method helps the researcher to describe the characteristic of challenges and opportunities of using the information communication in the libraries. The target population of the study consisted of library staff and users and these respondents are directly or in directly involved in the use of electronic information sources in Kajiado county library. The population of the study consisted the Library department with total population of 396 (Library user's statistics report 2014) but the researcher was only interested with those users and library staffs who were directly or in directly involved in the use of electronic information sources in the library. Those were library staffs 20 and library users 34. Hence purposive in nature. Questionnaire is the instrument used to collect data from the respondent

6. Results

The study targeted Fifty-four (54) library staffs and library users. All 54 questionnaires distributed, were returned representing a respond rate of 100% which is considered satisfactory for subsequent analysis.

Age distribution of the respondents

The respondents were required to select their age group starting from 25-41 years, and response rate were as distributed in the table below

Table 2: Age distribution of the respondents

Age	Number	Frequency
Over 41 years	2	3.7%
36-40 years	4	7.4%
31-35 years	8	14.8%
25-30 years	37	68.5%
Under 25 years	3	5.6%
Total	54	100%

Table 2 above indicate that 3.7 percent of the respondents were over 41 years while between 36-40 years were 7.4 percent. Those of age 31-35 years were 14.8 percent, 68.8 percent of the respondents were of age 25-30 years and those respondents under 25 years were 5.6 percent. It can be inferred that most of the respondents between 25-30 years make use of information communication technology in the library while using the virtual sources. This is because their age qualifies them to be more aggressive in accessing the electronic resources.

Level of education

The respondents were asked to indicate their level of education as this implied the researcher was able to understand if they clearly got the concepts asked.

Table 3: Level of Education

Level of education	Number	Frequency
Masters	1	1.9%
Certificate	14	25.9%
Diploma	35	64.8%
Degrees	4	7.4%
Total	54	100%

Table 3 above inferred that most of the respondents had certificates and diplomas and constituted 64.8 percent and 25.9 percent respectively. Those with masters were 1.9 percent while those with degrees were 7.4 percent. It can be deduced that most of the respondents.

Had enough knowledge and skills regarding the use of information communication technologies in the library shown above in the analysis thus the information gathered was reliable and could make good decisions on what is happening in the library

Ownership of the library

Table 4: Ownership of the library

Ownership	Number	Frequency
County Government	47	87%
National Government	7	13%
Total	54	100%

Table 5: Retrieval of the E- resources from the library

	Number	Frequency
Very fast and Easy	1	1.85.%
Fast and Easy	3	5.55%
Moderate	14	25.93%
Not very fast and easy	31	57.41%
Not fast and easy	5	9.26%
Total	54	100%

Table 5 above indicates that 57.41 percent of the respondents waste a lot of time in locating, accessing, retrieving and making use of E-sources. While only 1.85 percent indeed said that it is fast and Easy to access and make use of them. Those who were moderate were 25.3 percent. strongly disagreed that it is very fast nor fast to access the E-sources in the library.

From table 5 above 87 percent of the respondents said that the library belonged to the county government while 13 percent said it belonged to the national government. This indicated that the county government plays a bigger role in the control of the Kajiado county library as devolved Government is concerned.

Objective 1: Usability of electronic Information sources in the library

Accessibility and usability of E-resources

How fast can you locate access and retrieve the electronic information sources?

The respondents were asked if they were able to locate the relevant E-resources easily and retrieve them without wasting a lot of time for their use. The responses were illustrated in the table below.

The remaining 9.26 percent were of its neither not very fast nor fast, and it can be inferred that accessing and retrieving the electronic information sources for use from the digital library is not very fast and easy as supported by 57.41 percent of the respondents.

Applications of information communications technology in the library.
In which way do you use the E-sources in the library?

Table 7: Various ways of using E-sources by users

Ways of using the e-sources	Number	Frequency
Educational Instructional	17	31.48%
Research,	25	46.30%
Entertainment/Music	12	22.22%
Total	54	100%

From table 67above 31.48 percent of the respondents said that they use electronic information resources for educational instructional very often while 46.30 percent said they use virtual sources for research purposes often while the remaining 22.22 percent, noted that they use electronic information sources on the entertainment.

It can be concluded that at least ¼ of the respondents utilize the information sources on the research purposes as indicated by 46.30 percent.

Objective 2: Training and Skills on Information communication technology

Were you given orientation on awareness of new information communication technology in the library.

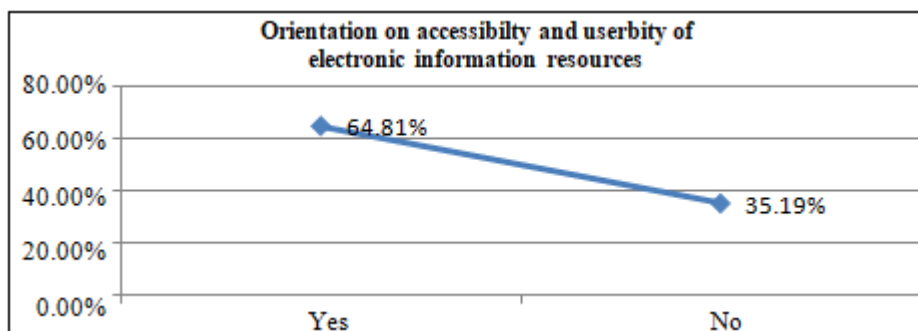


Figure 7: Orientation on accessibility and usability of electronic information resources

From figure 7 above 64.81 percent noted that were not oriented on how to make use of the electronic information sources once they are registered as library users, while 35.81 percent said they were given orientation and instructions on usability of new technology. This can be deduced that most of the respondents were not given orientation on how to locate, access, retrieve and use of electronic information sources once registered as library users as indicated by 64.81 percent.

Methods of learning the new Information communication technology

How would you prefer to learn on how to use the new technology?

The respondents were asked to identify different method they would prefer to train on how to use new information communication technology.

Table 10: Methods of learning the new technology

Ways of learning new technology	Number	Frequency
In a structured class	13	24.07%
From the supervisor	20	22.22%
In a workshop/Seminar	12	37.04%
From manual	8	14.81%
Not at all	1	1.86%
Total	54	100%

Deferent method is used to impact knowledge and skills to the library users and the staffs on how to make use of the E-sources. Majority of the library staffs indicated they would prefer to learn the new technology through the workshops and the seminars as it was indicated by 37.04% percent. While 24.07 percent said they would want to learn in a structural class. Those who said from the supervisor were 37.04 while 22.22 percent said in a supervisor. Another 14.81 percent of the respondents said from manual and 1.86 percent said not at all. Therefore, this implies, majority of the respondents would prefer to learn on how to use the new technology from the workshops and seminars as noted by 37.04 percent of the respondents.

Objective 3: Components of ICT Infrastructure in provision of E-sources

Availability of digital equipment's and facilities

Does the library have the pre-requisite IT infrastructures components in place to support the accessibility and usability of digital information sources?

Table 12: Availability of digital ICT infrastructure components in the library

Availability of digital infrastructure's components	Number	Frequency
Agree	25	3.70%
Strongly Agree	13	24.07%
Disagree	2	46.30%
Strongly Disagree	4	7.41%
Neutral	10	18.52%
Total	54	100%

Table 12 above indicates that only 3.70 percent of the respondents agreed on possibility of having all the necessary facilities and equipment's being readily available for use by the users in the library while 46.30percent Disagreed of having all the necessary IT components in the library. 7.41 of the respondents strongly disagreed. While 24.07 percent strongly agreed that there is availability of all the necessary equipment's needed.18, 52 were neutral thus it can be deduced that most of the respondents did not agreed that the library had all the IT infrastructure in place to facilitate easy access and use of E-sources as it was supported by 46.30 percent.

Internet connectivity of the library

Please rate the reliability of internet bandwidth connectivity in your digital library?

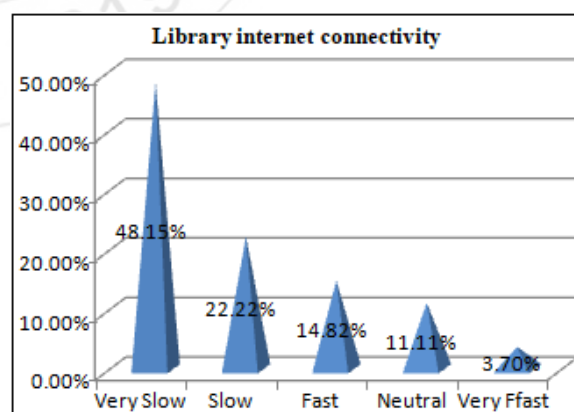


Figure 9: Assessment of the internet distribution of the library.

Figure 13 above indicate that 3.70 percent had their overview that the network in the library had the strong bandwidth which enabled the constant distributions of the internet in the library and was very fast to locate and retrieve the needed information resources as it was supported by 3.70 percent while 14.82 percent said that the internet

infrastructure performance of the library was fast. Those respondents who said that it was moderate were 11.11 and 48.15 percent said it was very slow and finally 22.22 percent of the respondents said the internet performance was slow. It can be deduced that the internet bandwidth of the library was very minimal which resulted to low internet distribution in the library was very slow as supported by 48.15 percent. This can be summarized in figure 13 below:

Storage equipment's of E-resources

What are some of the storage facilities that are used by the library to store and preserve the E-resources?

Table 14: E-resources storage equipment

Storage facilities of E-sources	Number	Frequency
Computers	13	24.07%
Flash discs	18	33.34%
CD'S	5	9.26%
Institutional repository	18	33.33
Total	54	100%

From the above table the respondents said that the library and the users mostly stores and preserve their Electronic information resources in the flash discs as it is supported by 33.34 percent.

While 24.07 percent said that they store their information in the computers (cpu) only 9.26 percent they said that they store their information in the Cds, 33.33 percent store the information resources in the Institutional repository. Therefore, it can be deduced that the library and the users they store the information in the flash disc as it is supported by 33.34 percent.

Objective 4: Challenges of using Information Communication Technology

Challenges faced by the library staffs and users

Do you face any challenge(s) while locating, accessing, retrieving and making use of the electronic information sources?

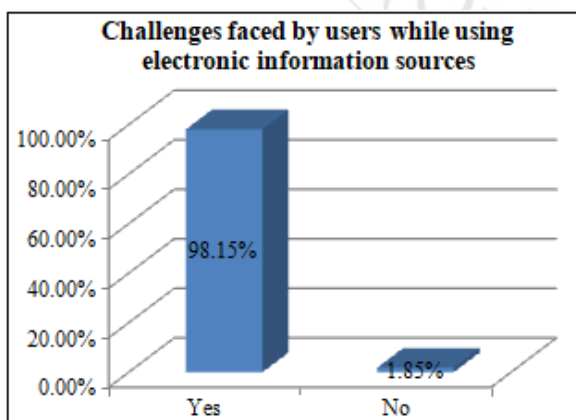


Figure 10: Challenge(s) encountered by the users while accessing and making use of the electronic information resources

From the figure above 98.15 percent of the respondents said that they faced many challenge(s) while accessing, locating, and retrieving and use of the digital resources and online information resources, while 1.85 percent said they did not

face any challenge. This can be deduced that many users are faced with challenges while accessing and using the electronic information resources as reported by 98.15 percent.

Types of challenges faced by the users while using the e-sources

What are some of the challenges do you face while using the E-sources in the libraries?

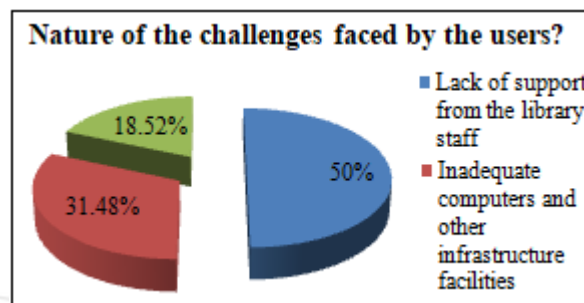


Figure 11: Nature of the challenges faced by the library users.

From figure 19 above 31.48 percent of the respondents said that they faced the challenge of inadequate computers and other infrastructure equipment's which were not enough to serve the users and at the same time the library staffs, while 18.52 percent said they were faced with difficulty in identifying, locating and retrieve the information sources. Those who were faced with lack of support from the library staff were 50 percent of the respondents. It can be deduced that many respondents were faced with the challenges of lack of getting support from the library staffs while using electronic information in the library as supported by 71.43 percent of the respondents.

Challenges of using metadata to locate access and retrieve the E-sources.

What metadata information do you think is the most challenging and confusing when using to access the electronic information resource in the digital library?

Table 17: The access point which is more difficult in using by the users to retrieve the E-sources

	Number	Frequency
Personal author	6	11.11%
Corporate author	2	3.70%
Title	5	9.26%
Subject/keyword	23	42.60%
ISBN	18	33.33%
Total	54	100%

From the illustrations above, 42.60 percent of the respondents mentioned keyword as an access point that was the most challenging and confusing when used to locate and access electronic information resource in the library. This is because the information sources lacked the metadata to illustrate the biodata. Those who said corporate author was a challenge were 3.70. percent while 9.26 percent of the respondents mentioned the title as the most challenging access point. The personal author was supported by 11.11 percent of the respondents and ISBN as a challenge in accessing electronic information resources was mentioned by 33.33 percent of the respondents. It can be deduced that

subject/keyword and ISBN were the most challenging and confusing access points while using them to access electronic information resources as mentioned by 42.60 percent and 33.33 percent of the respondents respectively.

7. Conclusion

As indicated earlier, the use of new technology in the devolved government libraries is still new and is changing fast. So rapid is the pace of revolution that it is difficult to assess its true state of development or to gain an overview of its impact on other fields, but in the library will enviably improve the quality of our lives in general and the efficiency of our libraries in particular. The multimedia through technology and networking can be effectively used for library management, databases, transportation and collection exhibition.

Mr. Louis Rossetto editor of wired magazine's has said "Technology is not a trend. It's not even a zeitgeist. This is a phreaking revolution" Further he warns that "the digital revolution is whipping through our lives like a Bengali typhoon" while we can foresee the great benefits of digital imaging the learning process' and experience are certainly needed to get from here to there.

The study inferred that most of the respondents who made use of the information communication technology in the library were between the age of 25-30 years. This is because their age qualifies them to be more aggressive in accessing and make use of the new technology sources. They are prone to technology.

It was also concluded that most of the respondents who worked in the library had enough knowledge and skills to work in the library and were able to castigate the knowledge they have to the library users so as they can cope with the challenges posed by the new technology as most they had degrees as was indicated by 64.8 percent of the respondents.

The study also concluded that the library belonged to the County Government because it plays a bigger role in the control of the library as indicated by 87 percent of the respondents.

Regular training of the library staffs is very important in that they keep abreast of daily changes in their field this as this enables them to cope up with the challenges posed with the new technology and enable them to operate the library efficiently and effectively as concluded by the study.

The study concluded that at least majority of the respondents often made use of electronic information sources in education instructional reasons as was supported by 46.30 percent of the study portion. They seek the information's for their daily needs. Other segment of the respondent outlined that they use the E-sources for the entertainment, for instance watching movies through the you tube, and also listening the music through the cds and dvd's, thus braking the monotony form the traditional way of reading.

The study concluded that most of the respondents were given orientation on how to access and use electronic

information resources once they registered as library users and this was indicated by 64.81 percent of the respondents. It was concluded that training of the library staffs is of more importance to the growth and development of the library unit and organization as a whole. Different organizations have their way of training their manual power, as per the study, at least majority of the respondents would prefer to learn on how to use the new information technology from their supervisors as noted by 37.04 percent of the respondents, some preferred learn through the workshops and seminar.

The study concluded that majority of the users were faced with challenges while accessing and using the electronic information resources as reported by 98.15 percent of the respondents.

The study concluded that many respondents were faced with lack of support from the library staff as a challenge while using electronic information in the library as supported by 71.43 percent of the respondents. It was concluded from the study that subject/keyword and ISBN as access points posed a lot of challenges to users to use them to locate the information sources. As was mentioned by 42.60 percent.

8. Recommendations

As derived from the objectives, the below recommendations were suggested

- 1) The county government should draft a sound policy to use in dispensing library functions.
- 2) The library staffs should sensitize the users on upcoming new technology in their areas of interest to maximize the use of digital information materials
- 3) Impact of ICT use in the operations of the government libraries in Kenya should be examined.

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