ACCESSIBILITY AND USE OF ELECTRONIC RESOURCES IN LIBRARY SERVICES IN TANZANIA: THE CASE OF THE BANK OF TANZANIA LIBRARY

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2014

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for the acceptance by the Open University of Tanzania a thesis titled: *"Accessibility and Use of Electronic Resources in Library Services in Tanzania: The Case of the Bank of Tanzania Library"* in the requirements for the award of Masters Degree in Information Studies.

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DECLARATION

I, **Seif R. Hikmany,** do hereby declare that this thesis is my own original work, and unless specifically indicated in the text and that it has not been submitted and will not be presented to any other university or institution for similar or any other degree award.

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Signature

……………………………….
Date

DEDICATION

This thesis is dedicated to my wives, Tahiya Thney Salim and Masude Mohamed Salim and to my children Tahiya Seif Hikmany, Faiza Seif Hikmany and son Mudriq Seif Hikmany. All of them sacrificed their good time, love and aspiration in daily life to let me accomplish this most wonderful gift of our happiness in this modern world. May Allah (God) blesses be upon all of us.

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ABSTRACT

The main purpose of this study was to investigate challenges of accessibility and use of electronic resources at the Bank of Tanzania Library (BoTL). Specifically, the study aimed at identifying electronic resources available for access and use by library users, the level of access to and use of electronic resources in the library, challenges faced in accessing and using electronic resources, and improve access to and use of electronic resources at the BoT library. The study was carried out in Dar es Salaam, at BoT headquarters, and data were collected through questionnaires, interviews and observation.

Findings revealed the types of electronic resources accessible in the library as indicated by the respondents, including electronic books, electronic journals, online databases, search engines and CD ROMs, electronic magazines, electronic newspapers and institutional websites. Although a majority of respondents about 27 (53.7%) were aware of various e-resources available in the library, some of 4 (9.3%) were unaware of the availability and accessibility of some electronic resources in the library, which posed a challenge to their effective use.

Findings related to the level of access to and use of electronic resources at BoT library revealed that while in the library, the respondents accessed and used electronic books, electronic journals in online databases, Search engines, CD ROMs, e-mail, social network sites, as well as the electronic catalogue (OPAC). The findings, however, showed that generally majority of respondents about 33 (66.7%) do not effectively use the electronic resources available in the library to meet their information needs, as noted by fewer respondents about 27 (55.6 %) who to borrow

various documents, instead of using online databases.

The findings revealed most challenges which are faced by users in accessing and using electronic resources. Such challenges includes inadequate computers with Internet connectivity, unaware of the existence of electronic databases available, limited access to online databases, inadequate search skills, occasional network failure, information overload, as well as time constraints. The respondents also recommended on strategies to be adopted, to improve access to and use of electronic resources, such as increasing the number of computers with Internet access, increasing awareness of available online resources, imparting users with information search skills, as well as creating an Information Communication Technology policy. This study recommends prioritising in creation awareness on the e-resources available and accessible in the library, imparting information literacy skills to library users, as well as having an effective library policy.

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LIST OF ABBREVIATIONS

BoT   Bank of Tanzania

BoTL   Bank of Tanzania Library

CD ROMS Compact Disc Read Only Memory System

COSTECH Commission of Science and Technology

COTUL   Consortia of Tanzania University Libraries

DIT   Diffusion Innovation Theory

DMIS   Directorate of Management Information System

ICT   Information Communication Technology

IL   Information Literacy

IT   Information Technology

NGOs   Non-Governmental Organisations

OUT   Open University of Tanzania

SPSS   Statistical Package for Social Sciences

TCC   Tanzania Communication Commission

TCRA   Tanzania Communication Regulatory Authority

UNDP   United Nations Development Programmes

URT   United Republic of Tanzania

USD   United States Dollar

US   United States

USA   United States of America

CHAPTER ONE

1.0 INTRODUCTION

1.1 Introduction

This is an introductory section, which is composed of eight main parts. These include a background of Bank of Tanzania library (BoTL) from the print materials to accessibility and use of electronic resources, statement of the problem, objective of the study, research questions as the opener of this research, the significance and limitations of the study, definition of the terms and the theoretical framework.

1.2 Background Information

Electronic resources include databases, books, journals, newspapers, magazines, archives theses, conferences papers, research papers, scripts and monographs in electronic forms. Adam and Bonk, (1995), Nicholars *et al*, (2007). In recent decades, countries, organisations and individuals around the world have been applying Information Communication Technology (ICT) to improve life, increase efficiency and productivity (Young, 1993). All this has been possible due to availability, application and information communication technologies ICT, which facilitate manipulation. This has also made processing, storage and dissemination of information. Due to these new developments in the world has become a global village, with no barriers related to time and space.

Libraries around the world have also been applying ICT in order to improve their services (Clayton, 1987) traditionally libraries have been stocked mainly with print resources, such as books and magazines. However, in recent decades there have been problems with access to print resources, especially in developing countries like

Tanzania. These problems are a result of declining library budgets. However, with the advents in ICT, it has possible to have access to library resources in electronic formats, which take up less space and which can be accessed by multiple users at the same time. ICT developments also facilitated library operations such as acquisition, circulation of library materials and services, cataloguing, resource sharing and social contacts.

In Tanzania, the application of ICT began in the 1960's following installation of the first computer at the Ministry of Finance. Libraries began to apply ICT in the 1990's. The first libraries to apply ICT in Tanzania are the University of Dar Es Salaam Library and Sokoine University of Agriculture Library. Other libraries in the country are following suit (Mgaya, 1994). These libraries began to apply ICT in simple operations such as cataloguing and classification, and later to make available to their users as resources which were in electronic form in order to supplement printed resources.

The Bank of Tanzania (BoT) as a Central Bank and a financial institution that has libraries with resources available for its users. Bank of Tanzania has discharged it responsibly and effectively, since it started operation in 1966. The BOT is a turning point of financial sector development in the United Republic of Tanzania started in the 1990s, following the implementation of the Nyirabu commission's recommendation to liberalize the financial sector reforms. Thus the Commission's recommendations, a number of legislations were enacted to pave way for licensing of new banks and financial institutions and to allow for market determined financial resources allocation as well as financial asset prices. The enactment of the BOT Act

of 1995 provided the Bank with the requisite autonomy important for an effective discharge of its core role of maintaining price stability in the economy. Mainly through the use of market based policy instruments.

Roles and Functions of the Bank of Tanzania;

The primary objectives of the BOT were to formulate, define and implement monetary policy directed to the economic objective of maintaining domestic price stability conducive to a balance and sustainable growth of the Tanzania economy.

i. To open Market Operations: this refers to sales and purchase of government securities in the money market.

ii. Repurchase Agreement: introduced repurchase agreements (Repos) which are used to fine tune liquidity in the banking system with maturity ranging from 1 day to 21 days

iii. Foreign Exchange Market Operations: is the auction system was replaced by the Interbank Foreign Exchange Markets that determines the Tanzanian Shilling exchange rate.

iv. Moral Suasion; this instrument has been used mainly through regular meeting with the stakeholders in the financial sectors to deliberate on key issues of relevance to the financial sector.

v. Bank of Tanzania as the Banker and Fiscal Agent of the Government: it maintains governments' revenue and expenditure accounts, makes transfers, open letters of credit, and extends credit to the treasury. Additional, the bank issues and manage public debt securities on behave of the government.

Hence the Bank of Tanzania libraries was been established to support the day to day business in the Bank. Therefore the main functions are to provide information services to members of the bank as well as some external users in support of research studies and daily references. However the Bank of Tanzania library is a special library its contents reflect only the main subject related to the functions of the bank.

The library has two sections, one for books and the other for journals. Thus the main subjects are in twelve classes through all library material were classified using a Universal Decimal Classification (UDC) that was known to be very specific in identifying subject matters. These classes were:

i. Computer Science - 004

ii. Management - 005

iii. Librarianship - 020

iv. Research -303

v. Economics - 330

vi. Finance and Banking - 336

vii. Law -340

viii. Marketing and Trade - 339

ix. Mathematics and Statistics - 510

x. Accountancy - 657

xi. Business Management - 658

xii. Reference Works - 038

In 2001 the library was computerized using 'Alice Library Software' to enable Bank staff to access the catalogue through the Intranet on their desktop computers. By

2007 the library moved information migration from Alice Library Software to Liberty-3 a web based data. While at present the Bank of Tanzania library services are well centralized and are online only through the Bank's Intranet. Currently all staff at the head office and its branches at Arusha, Mbeya, Mwanza and Zanzibar can be access electronically. Moreover, staff can share their libraries materials through reservation or request online and receives the books by post. That enables all users to be well informed and thus knowledgeable, Rowley & Farrow (2006). Knowledge is knowing, familiarity gained by experience, range of information; a theoretical or practical understanding of as well as the sum of what is known.

1.3   Statement of the Problem

Today many libraries apply ICT in a myriad of ways including accessing electronic resources to supplement inadequacies in print resources and therefore facilitate access to a wide range of materials available globally. Therefore libraries apply ICT to improve the quality of services they provide to their users and to have timely access to information for decision making. ICTs also facilitate the daily operations of an organisation, including fast communication, and access to up to date information, regardless of geographical and time barriers.

Despite the fact that ICT is beneficial to libraries, yet many libraries specifically in developing countries don't fully benefit from ICT due to a number of barriers, such as lack of ICT facilities, high Internet connectivity charges, low connectivity speed, lack of skills in accessing and using e-resources and unguaranteed sustainability, Chivhanga, (2000); Mutula, (2001); Ngini, (2002). This has negatively affected access to and use of e-resources by library users.

The BoT library has automated its services in order to cope with the problem of inadequate subscriptions of print material allow users to remotely identify and reserve or borrow online. The BoT library subscribes to a number of electronic resources, in addition to those that the bank generates or obtains freely from other sources. Moreover, various information retrieval tools such as the Online Public Access Catalogue have been installed at the library to facilitate access to library resources.

However, it is not known whether users are aware of these resources or the extent to which users make use of available electronic resources and the challenges they face in accessing and using e-resources in the library. Although there is abundant literature on the challenges of access and use of e-resources in libraries in developing countries, Adika, (2003), Mbogo, (2000) yet there is inadequate literature as far as special libraries are concerned. This study focused the Bank of Tanzania library headquarters, which serves specific categories of users, to determine the various challenges they face in accessing and using electronic resources.

1.4 Objectives of the Study

This study was guided by the following General and Specific objectives, as follows:

1.4.1 General Objective

The General objective of this study was to investigate challenges of accessibility and use of electronic resources at BoT library.

1.4.2 Specific Objectives

The specific objectives of this study were:

i. To identify electronic resources available in the library.

ii. To investigate the level of access and use of electronic resources at BoT library.

iii. To find out challenges faced in accessing and using electronic resources at BoT Library; as well as

iv. To get views on how to improve access to and use of electronic resources at BoT Library.

1.5 Research Questions

Based on the above objectives, the study addresses the following questions:

i. What kind of electronic resources are available and accessed by users at the BoT library?

ii. To what extent are electronic resources accessed and used at BoT library?

iii. What challenges do users face when accessing and using electronic resources at BoT Library?

iv. How can access and use of electronic resources at BoT Library be improved?

1.6 Significance of the Study

The study results are significant in the following ways: They unveils the extent of access and use of electronic resources at the BoT library and the challenges faced in accessing and using these resources at the BoT library. The findings will help the BoT management to put in place strategies for improving access and effective use of electronic resources at the Bot library. In addition, findings have contributed to existing literature on the topic under investigation.

1.7   Limitations of the Study

This study investigated challenges of accessing and using of electronic resources in organisational libraries, with special reference to the BoT library. The researcher would have preferred to conduct more studies in similar libraries, but due to time constraints, the study was limited to BoT library. However, the researcher expects that the findings reflect what is happening in other special libraries.

1.8   Definition of Key Terms

For the purpose of this study the definitions of the following terms will be used;

Access

Access can be defined as "The right or privilege to approach, reach, enter or make use of something." In relation to this study, the word '*access*' electronically means "to obtain or retrieve (information) from a storage device".

Electronic Resources

Electronic resources or e-resources are defined by AACR2 (2005, page 16) as "Material (data and/ or program(s) encoded for manipulation by a computerized device. These materials may require the use of peripheral directly connected to a computerized device (for example, CD ROM drive or a connection to a computer network like, the internet). Hence, e-Resources can be further defined as: "a collection of on-line publications indicating an author, title, date, place of publication, publisher's detail, as well as edition" (electronic resources)

Library

Encyclopaedia Britannica Macropaedia vol. XXII (1992, page 962) defines library as the collection of written, printed, or recorded material (including films, photographs,

tapes, phonography records, videodiscs, microforms, and computer programs) organised and maintained for reading, study and consultation. According to Ritchie (1982:1) a library is "a collections of printed materials, on printed media or computerized information resources which are systematically organized for use (this definition encompasses documentation centres, data bases and information networks". A library is also defined as a "place in which literary, artistic, musical reference materials (books, manuscript, recording or films) are kept for use, not for sale)" (Merriam-Webster, 1983) Basically, a library is a collection or group of collections of materials organized and maintained for use (consultation, viewing, research, etc.) which is organized to facilitate access by students or the general public, and is staffed by librarians and other personnel trained to provide services to meet user needs.

Use: Use may be defined as "the power, right or privilege of employing or using something"

1.9 Theoretical Framework

This study adopted Roger's Diffusion of Innovation Theory. Roger's Diffusion of Innovation Theory is concerned with the manner in which a new technological idea, artifacts or technique, or a new use of an old one, migrates from creation to use. According to Diffusion of Innovation Theory, technological innovation is communicated through particular channels, over time, among the members of a social system. The stages through which a technological innovation passes are as follows: knowledge (exposure to its existence, and understanding of its functions); persuasion (the forming of favorable attitude to it); decision (commitment to its

adoption); implementation (putting it to use); and confirmation (reinforcement based on positive outcomes from it).

Important characteristics of an innovation include: relative advantage (the degree to which it is perceived to be better than what it supersedes); compatibility (consistency with existing values, past experiences and needs); complexity (difficulty of understanding and use); trial ability (the degree to which it can be experimented with on a limited basis); and observability (the visibility of its results). Diffusion of Innovation Theory is at its best a descriptive tool, and provides guidance as to how to accelerate the rate of adoption. It also helps to summarize existing knowledge and explain observable events. (The Turkish Journal of Educational technology- TOJET April 2006)

In this study, Roger's 1995's Diffusion of Innovation Theory was used to understand factors that influence the move from traditional (manual) to adoption of electronic (computerised) systems in the context of the Library of the Bank of Tanzania. Roger's Diffusion of Innovation Theory offers powerfully conceptualizing factors that influence the adaptation or acceptance of new innovations in terms of ICT establishment and consequential e-resource access. Roger's DIT consists of five key stages which are: Knowledge, Persuasion, Decision, Implementation as well as Confirmation.

The assumption in this study is that most staff and management are aware of the benefits of library automation. However, the decision to automate the library resulted from confirmation of perceived benefits as shown in the modified model, in Figure

1.1. Thus, the DIT demonstrates, facilitates comparison, as well as evaluates factors that influence individuals or institutions to adopt library automation.
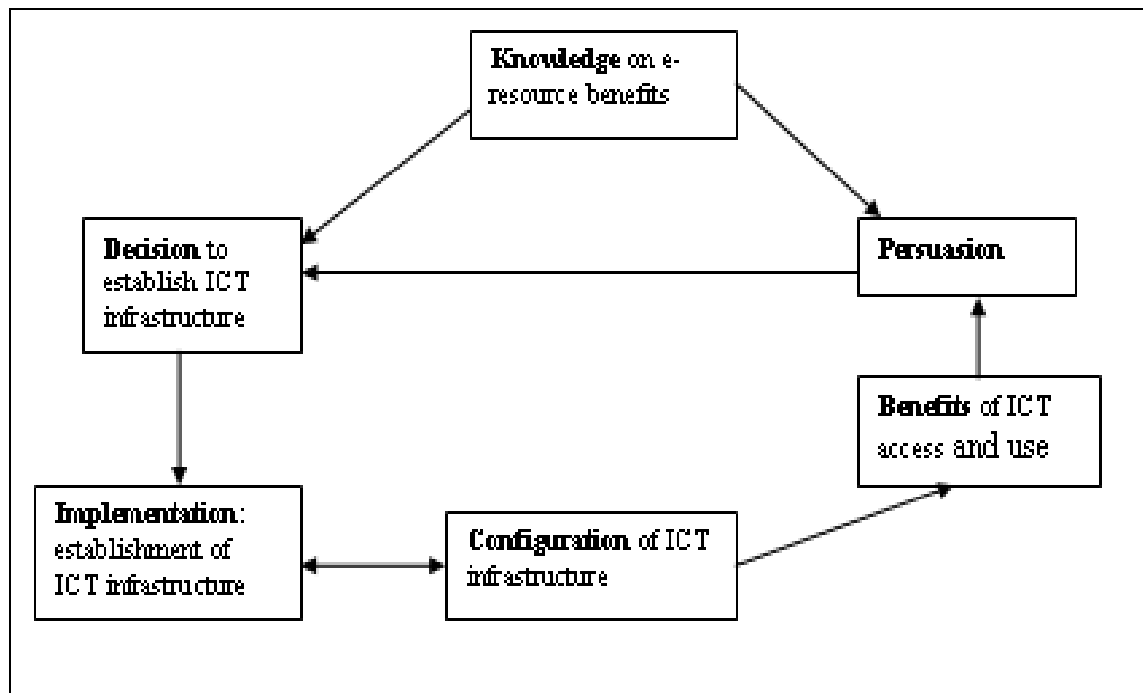
Figure 1.1: Conceptual Model

Source: Adapted by the Researcher from Rogers' Five Steps of Innovation Adoption

The framework in Figure 1.1 was used in this study to highlight areas for developing related literature and discussion of research findings. However this conceptual model show six stages from knowing the important of establishing an e-resources centre to its full implementation. Stages in Roger's DIT as explained as follows:

Knowledge Stage

At this stage the library management conceived and receives information on ICT application in the library environment.

Persuasion Stage: At this stage the management is impressed by the information on ICT application and considers its potential benefits.

Decision Stage: At this stage the management decides to establish an ICT infrastructure in the library.

Implementation Stage: At this stage the management decided to put into practice the knowledge accrued, and proceeds with establishment of an ICT infrastructure, including internet connectivity and accessibility to and use of e-resources.

Confirmation Stage: At this stage the management noted some advantages of ICT establishment. The management is persuaded to approve and adopt the technology.

1.10 Summary

This chapter is about Rogers Diffusion of Innovation Theory is the most appropriate for investigating the adoption of the technology in introducing access and use of electronic resources in library services. In fact much Diffusion research involves technological innovations so Rogers (2003) usually use the word "technology" and "innovation" is synonyms. Thus Rogers, "a technology" is a design for instrumental action that reduces the uncertainty in the cause effect relationships involved in achieving a designed outcome (p.13).

It is composed of two parts: hardware and software while hardware is "the tool that embodies the technology in the form of a material or physical object" as in this research it reflect to the old technology "printed documents" to new one as can be defined here to be a software as source of information base for the tool "e-resources", it is a new technology that move from print to electronic material, Rogers, (2003), p.259. Based to our study Rogers (2003) adoption is a decision of "full use of an innovation as the best course of action available" (p. 179). Rogers

defines diffusion as "the process in which an innovation is communicated through certain channels over time among the members of a social system" (p.5) This innovation can accelerate through knowledge, persuasion, decision, implementation and communication stages as the five vital components of the diffusion of innovation process that the organisation can practice to accomplish the best performance for further developments.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1   Introduction

This chapter presents a review of theoretical and empirical literature pertaining to access and use of electronic resources. The aim was to identify the contribution of those studies to the available body of literature as well as any gaps in the literature. The literature review is organized around broad themes and covers the period between the year 1987 and 2013.

2.2   Origin and Developments of ICT

According to Young (1993), computer technology was born and raised by the USA armed forces and popularized by consumer economy. Computer technology was first applied to solve massive mathematical problems for which the military wanted answers, such as explaining the turbulence created by atomic explosion or predicting the fight of artillery shells. These were later put to work on exhaustive civilian tasks such as computing the payrolls of large companies or tabulating census questionnaires.

Further development of computer technology and invention of better communication channels led to the improvement of computer technology with networking ability. Such networks are mainly categorized as Local Area Networks (LAN), Wider Area Networks (WAN) internet. The United Nation Development Program (UNDP) (1999) revealed that, the Internet -center less web of computer networks was funded by the US Department of Defense in the late 1960s as a strategy for communicating during a nuclear attack. Soon it was used to link technically skilled science and

university communities. The same source noted that, in the early 1990s user-friendly innovations that are the creation of the World Wide Web and the distribution of free browser turned the arena of computer language into simple point and a click of a mouse making internet more widely accessible. It is also argued that, at the same time computers became much cheaper, and the network took off.

Following these advances in computing and communication technologies, the technology has attracted wide attention of scholars, researchers, politicians and donors for its application in various fields. For instance in 2001, the Government of the United Republic of Tanzania established a National Website (http://www.Tanzania.go.tz) intended to expose Tanzania's profile to its citizens and the outside world using the Internet and the World-Wide-Web. The website was expected to promote good governance, attract investment and enable effective participation of citizens in the globalize economy.

ICT application in different sectors can enhance development and reduce cost when applied effectively in information management, processing and services. Nevertheless, ICT development has been growing gradually in developing countries, specifically African countries. (Munasinghe, 1989) noted that development of Information Technology (IT) in Africa has been slow due to high cost, lack of good communication systems and lack of trained manpower to manage IT facilities and services.

2.3   An Overview of ICT Developments Globally and in Tanzania

Information and communication Technology (ICT) which combines three technologies: computing, microelectronics as well as telecommunications to carry,

process and store information, has been widely applied in various human activities. This has increased efficiency and reduced costs. Developed countries are more advanced in taking advantage of the benefits accorded by ICT. Developing countries on the other side are also making efforts to ensure that benefits accruing from ICT are incorporated into their economies.

In Tanzania, many sectors and institutions use and apply ICT in their daily activities to reap the benefit potentials of ICT which include improved efficiency and performance. For many years Tanzania had no ICT policy. Poor harmonization of initiatives led to random adoption of different systems and standards, unnecessary duplication of effort and waste of scarce resources, especially through the loss of potential synergies. The Government created an ICT Policy in March 2003, deploying a broad-based strategy to address Tanzania ICT development agenda. The national ICT policy is aligned to the following vision statement, "Tanzania becomes a hub of ICT infrastructure and ICT solution that enhance sustainable social-economic development and accelerated poverty reduction both nationally and globally".

According to Tanzanian government website, the National ICT policy objectives include: -

i.   Raising the level of awareness on the role, use, application and potential of ICT;

ii.   Increasing the use of ICT for equitable and sustainable socio-economic and cultural development of Tanzania; and

iii. Putting in place appropriate mechanisms which will make coordination of

the policy implementation and thus making ICT effective. Moreover, it is necessary to review existing legislation to create the appropriate legal framework within which this policy will be implemented.

The introduction of computers was beset by a lack of qualified indigenous personnel and uncoordinated planning. During that time installations were totally dependent on foreign experts. Some of whom were not adequately qualified or experienced and implementation was properly documented and after they left technical services support was not available since no local personnel had been trained to run the systems.

Therefore, the government incurred a heavy financial loss and was highly criticized by Members of Pparliament and the general public. As a result of this, in 1974 the government banned the importation of computers and all related equipment into Tanzania. This decision greatly affected ICT development in the country. In the early 1980s the government lifted the ban on computers. This decision opened doors for the importation of computers. At this time microcomputers were introduced in the market, and existing computers in the government had become obsolete and frequently broke down. After lifting the ban, the coming of microcomputers brought a lot of difference in people's thinking about computers and their uses.

Many private companies and some individuals started to import computers, and so the number of units being imported into the country grew very fast. There were about 52 companies listed in the Tanzania Yellow pages under the 'Computer hardware, Software and Maintenance Services" where 39 (77%) advertise e-mail addresses and 10 (19%) have web pages. Four companies listed under" Computer

training and 20 went under Telecommunication Equipment and Services. The prominent international brand names that conspicuous in Tanzania include: Microsoft, Compaq, Hewlett Packard, IBM, Cisco, Epson, Oracle, APC, 3m, Nokia Motorola and Ericsson. Most of the companies were not directly presented in Tanzania but operated through agents.

With regard to the electronic mail services/iinternet in Tanzania, COSTECH (1999), reported that the Internet in Tanzania has come a long way in a short time. It started in the early 1990's when all that was there was a very basic store and forward electronic mail facilities. Full iinternet connectivity is available from over 20 Internet Service providers and this is attributed mainly to policy changes in the telecommunication sector which started in 2003 when parliament adopted an Act to establish the Tanzania Communications Regulatory Authority (TCRA) which replaced the former Tanzania Communications Commission (TCC).

Over the years, notwithstanding the 1974 ban, Tanzania achieved notable progress in deploying ICT. The achievements were a result of various adjustments since the early 1990's in terms of policy, regulatory and commercial facets, and both macroeconomics and within ICTs' converging sectors, Anuja, Utz (2006). The private sector has certainly contributed to these achievements by investing in support facilities, training centers, sales and outlets which enabled government departments, learning institutions, NGOs and other enterprises to acquire ICT solutions that address their individual problems more appropriately. Several efforts are now underway including adoption of the national ICT policy to guide development of the sector in the country. This policy highlights the vision and mission regarding ICT

and its development in Tanzania The policy vision states:

> *By exploiting its unique geographical position Tanzania becomes a regional hub of ICT infrastructure providing ICT based solutions that enhance sustainable socio-economic development, which addresses national and regional poverty reduction concerns.* (URT, 2002).

The vision statement is aligned to the mission statement, aiming at co-ordination of ICT activities in the public and private sector and to provide a conducive legal and regulatory framework for public and private infrastructure investments in e-commerce, capacity building in infrastructure and human resources, software and hardware development and production, as well as promoting regional and international co-operation. Basically, the aim is to provide a national framework that will enable ICT to contribute towards achieving national development goals and to transform Tanzania into a knowledgeable society through application of ICT.

2.4 Role of ICT in the Library Services

Protecting financial information of customers and delivery of high quality service is critical to the success of financial institutions. Thus having an active library in financial organisation will cater for the provision of current information and the preservation of an organisation records. There are many organisations that have embraced library services to improve delivery of quality services including an up to date information to its management. Such services to the financial institutions are information basis for making credit decisions, providing advice to individuals and the business community about viable available financial choices.

ICT has a role to play in improving efficiency and performance of organizations and ensuing access to information. However, Clouted and Nyman, (2003) point out that "currently we are in the middle of the information age, suffering from information anxiety caused by info glut and info famine." Electronic records present new challenges, and are highly dependent on software, hardware applications as well as operating systems which have high storage capacity. Moreover, not only do they offer substantial space savings, they also provide fast access to information unmatched in the paper world.

These new developments, the ICT age have improve the handling of library services in provision of fast information services to its users. The electronic services minimise the work of filing and make less intensive and time consuming activity. These library system allows multiple options for retrieval can be provided without using cross-references or making duplicates for filing under different headings. While a paper file can be consulted in only one place at one time, electronic systems allow simultaneous access by multiple users. Physical proximity to storage areas is no longer a prerequisite for speedy access. Records can be delivered almost instantly to distant as well as to local users. Subsequently, the risk of loss has been substantially reduced. Unlike their paper counterparts, online electronic records are not liable to damage by over handling, nor can they be accidentally misplaced. If security copies of electronic records are required, they can be created with minimum effort.

If records are created and received in both media, the options of retention include digitisation or maintaining a hybrid system; that is, some records can be retained in

paper format and others in electronic format (Shepherd and Toe, 2004). Using a wholly digital approach means that records are created, transmitted and received electronically where possible, and retained in electronic format; paper records are digitised using imaging technology. Where records are printed on paper (or other formats such as microform), electronic systems may be used for drafting or messaging, but not for retention of records. The 'print to paper' option preserves static content but the ability to search, disseminate and retrieve records is lost.

Both these approaches raise questions of authenticity. For example Robek (2000) argues:

> *"If records are to serve as evidence of organizational activity, a future user must have confidence that they are authentic and intact, particularly in the event of a legal dispute, where the opposing party may attempt to repudiate or discredit a record".*

Thus a paper printout is not the original record of an electronic transaction and the digitised image is a copy and not the original record of a paper-based activity. In practice it is often necessary to maintain a hybrid collection, where some records are retained on paper and others electronically. The use of ICT in the library services has led to the belief that we are moving towards a "paperless office and paperless society" (Robek, 2000). This idea emerged during the early 1980s, when a wide variety of "office automation" technologies appeared on the US market. Some also predicted the demise of paper documents, filing systems because new information and communication technology offered the means of replacing paper documents with electronic document images.

2.5 Related Empirical Literature

A number of studies have been conducted on ICT application in library services in Tanzania, but there is inadequate coverage on e-resource access and utilization in financial institutions. For example, Elly, (2002) investigated ICT access and use in research institutions in Tanzania, and found that due to poor infrastructure, poor ICT skills among potential users, lack of ICT policy as well as poor management limited access and use of ICT. He further noted that the root cause of these problems emanates from the poor economy and limited funds allocated to acquisition of ICTs. Also, poor access and use are also associated with unfavourable management conditions, bad physical settings/location of the gadgets, poor time allocation for use of ICT facilities and constraining bureaucratic procedures.

Another study by Bynit (2002) carried out at the School Inspectorate Department of the Ministry of Education and Culture in Tanzania found that problems hindering application of ICT include illiteracy and shortage of IT facilities, lack of funds, and lack of qualified/skilled staff, power cuts and no participation in budget allocation. Ngomuo, (2001) pointed out several problems in relation to application of ICT in Tanzania, including lack of skills, inadequate facilities, low budget for acquisition and maintenance of IT resources, power shortage, lack of computer networking and appropriate software in the banking system.

Generally, available literature shows that problems which hinder effective utilization of ICT in library services are varied but are mainly related to limited IT skills, knowledge and competence among staff, inadequate IT facilities, lack of computer networks and appropriate computer software. The recommended solutions for such

problems include formulation of appropriate policy, staff training and improved infrastructure for effective and efficient ICT use and providing computer networks in the respective organizations. However, for the case of Bank of Tanzania the reasons which hinders the effective utilisation of ICT is not known and this study is geared towards evaluating the challenges of accessibility and use of electronic resources in its library with regards to the number of e-resources acquired by the library.

2.6 Literature Gap

The review of literature has shown that several studies have been conducted with regard to access to and use of e-resources in libraries in the context of both developed and developing countries. However, no studies have been conducted on challenges facing users regarding accessibility and use of e-resources at the BoT library in Tanzania. This is the gap that this study attempted to fill.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology employed in this study. The chapter starts by describing the research design, which laid the foundation for identification of the area of study, population, sample size, sampling techniques, data collection methods and instrumentation, as well as data analysis techniques.

3.2 Research Design

The methodology deployed in this research aims at providing evidence on the population of staff exploit the library in finding information and other reference works so that the plan for collecting and utilizing data were obtained with sufficient precision. This study employed both quantitative and qualitative research designs. Qualitative research designs enabled researcher to give a complete, detailed description of observed phenomenon, Moustakas (1994) discussed the philosophical tents and the procedures of the phenomenological method, and Stake (1995) suggested processes involved in case study research. Whereas quantitative research designs enabled to construct statistical models in an attempt to explain what is observed in specific single-subject experiments, Cooper, Heron, & Heward (1987): Neuman and McCormick, (1995). In employing qualitative research design, a case study approach was used, where the focus was on a unit of analysis.

3.3 Area of Study

The study was conducted at the Bank of Tanzania headquarters library in Dar es Salaam. This library was selected because it is a special library, and the researcher is

familiar with the institution. In addition, the library is stocked with an electronic resources that are accessible to members of staff and other external users.
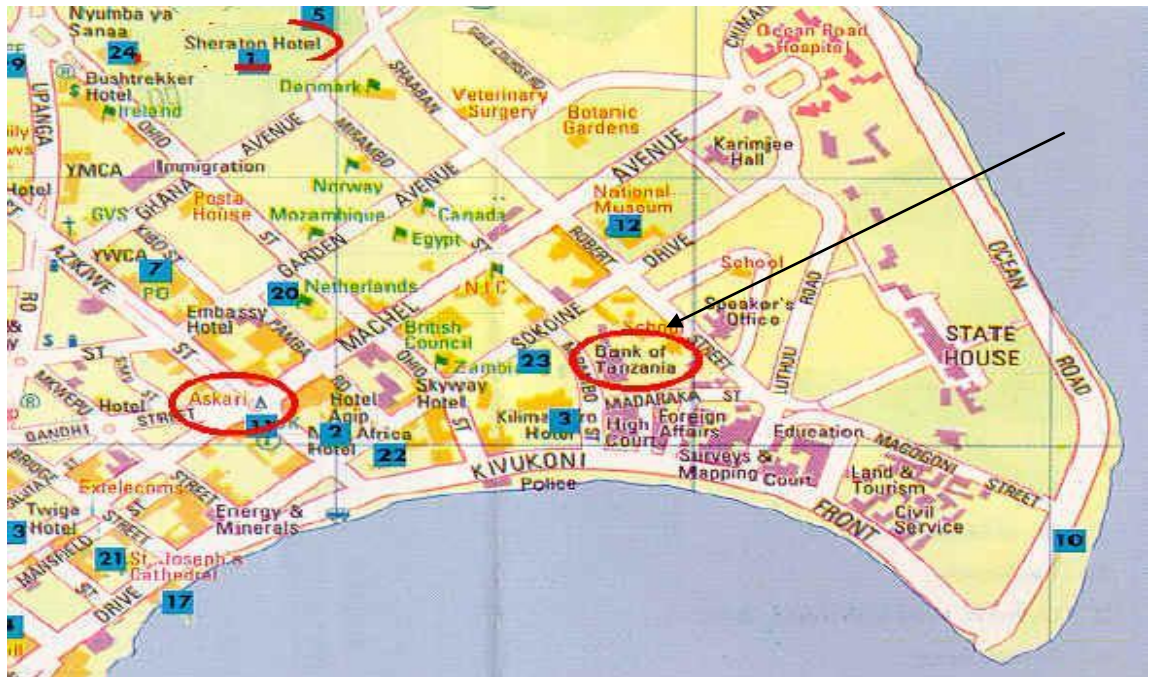
Figure 3.1: Map Showing Location of the Bank of Tanzania
Source: Bank of Tanzania Website (2012)

Bank of Tanzania Headquarters at Dar Es Salaam situated between 'Milambo Street' at the front and 'Shaaban Robert street' at the back. While 'Sokoine drive' was at the north and 'Madaraka street' at the south. Hence BoT Towers is located at number '2 Milambo Street'.

3.4 Population of the Study

The population of the study consisted of BoT officers (users of BoT library), management staff and information officers (library staff and ICT staff). These categories of respondents were considered to have information related to the topic under study.

3.5 Sample Size

Although the Bank of Tanzania headquarters have about five hundred staff, only one hundred were considered to be regular users of the library. Among them were daily users, half of them seasonal user; those who used the library only on special assignments such as writing research reports or those who utilized library services while on scholarships. Due to the above nature of users, a total of fifty four (54) respondents were found ideal to participate in this study. These consisted of thirty eight (38) BoT officers (library users), four management staff, six library staff and six ICT (DMIS) staff all of whom were regular users of the library

3.6 Sampling Techniques

The respondents were selected randomly and purposively. Random sampling method was used to select the BoT officers. The researcher used a BoT staff list to randomly select respondents. This sampling technique is beneficial because it gives equal chance to all respondents to be included in the sample. Purposive technique was used to select BoT management staff, library staff and ICT staff. This method enabled the researcher to get rich information from key informants. Management staff were included since they were the one who could approve the funds for establishing and maintenance of that library system. On the other hand ICT staff were considered as collaborators who designed or supported the required library software while library staff were included in the study as they were main operators of the library system.

3.7 Data Collection Methods

Primary data were collected through a questionnaire both open and closed, interviews and observations. The questionnaires were distributed to 54 BoT staff

(library users). Questionnaire method is advantageous in terms of economy, as it allows researcher to collect data from a larger number of respondents more cheaply than other methods such as interviews. Questionnaire was self-administered, however it takes long time to be returned and in some instant the researched visited same respondents to guide them through answering, therefore all questionnaire were returned while the interviews were done through face to face approach, an appointment were made in advanced to visits a respondent. Therefore questionnaire and interview methods were used to all 54 selected respondents as library users.

Secondary data for this study were collected through review of documentary sources, including books, journal articles, research reports, electronic resources and unpublished, were reviewed and major points summarised. Participant observation was used to get a clear picture of the situation and to supplement information obtained through the questionnaire and interview. The following were observed, ICT facilities and use of electronic resources at BoT Library. The methods help research to get information of the respondents as education, gender, observing their skills while using library services, computers and the internet.

3.8 Pre-test

Before fieldwork, the instruments were pre-tested on a smaller sample of library users at the Bank of Tanzania Headquarters Library. In order to improve the validity and reliability of the instrument and in order to determine if the questions met the needs and objectives of the study. Findings from the pre-test became the basis for improving the instruments.

3.9 Data Analysis

Quantitative data collected were organised, coded and analysed quantitatively. A Statistical Package for Social Sciences (SPSS) was used to generate frequencially percentages tables and figures while qualitative data were analysed using Content Analysis.

3.10 Summary

This chapter presented the research design, study area, population of study data collection methods, sample and sampling techniques, pre-test and data analysis. Combination of methods was used to collect data for this study. These included a questionnaire, interview and observation to respondent. A total of fifty four respondents participated in this study.

CHAPTER FOUR

4.0 PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

The main purpose of this study was to investigate challenges of accessibility and use of electronic resources at the Bank of Tanzania library. Specifically, the study aimed at identifying electronic resources available for access and use by library users, the level of access and use of electronic resources at BoT library, challenges faced by users when accessing and using electronic resources at the BoT library, and how to get views on access to and use of electronic resources at BoT Library can be improved.. The study was conducted in Dar es Salaam, at the BoTL headquarters. This chapter presents and discuss the findings.

4.2 Socio-Demographic Characteristics of the Respondents

The following subsection presents the socio-demographic characteristics of the respondents who participate in this research.

4.2.1 Gender of Respondents

Table 4.1: Gender of Respondents (N=54)

Variable	Frequency	Percentage
Male	30	55.60%
Female	24	44.40%
Total	54	100%

Source: Field Data (2012)

Starting with the gender, about thirty 30 (55.6%) of respondents were male while 24 (44.4%) of respondents were female. This shows that there is almost an equal

number of male and female participation. Figure number 4.1 shows the gender of respondents.

4.2.2 Age Profile of the Respondents

Table 4.2 presents age profile of the respondents who participant in the study.

Table 4.2: Age Profile of the Respondents (N=54)

Variable	Frequency	Percentage
Less than 30 years	8	14.8
30-39 years	19	35.2
40-49	23	42.6
50 +	4	7.4
Total	54	100

Source: Field Data (2012)

Table 4.2 shows that 8 (14.8%) of the respondents were aged below 30 years, 19 (35.2%) respondents were aged between 30 and 39 years, 23 (42.6%) were aged between 40 and 49 years, and only 4 (7.4%) were aged 50 years and above. As shown in Table 4.1, majority of respondents were aged 30 years and 49 years. Few respondents were aged less than 30 years or 50 years and above. This also shows that it is the new generation which was born during this modern computer time

4.2.3 Marital Status

Information on the marital status of the respondents is presented in Figure 4.2: This help the researcher to see how the gender participate equal in the search of education, by making reference in their daily business, may be by doing research

works or by keeping themselves abreast with current information in the knowledge sphere.
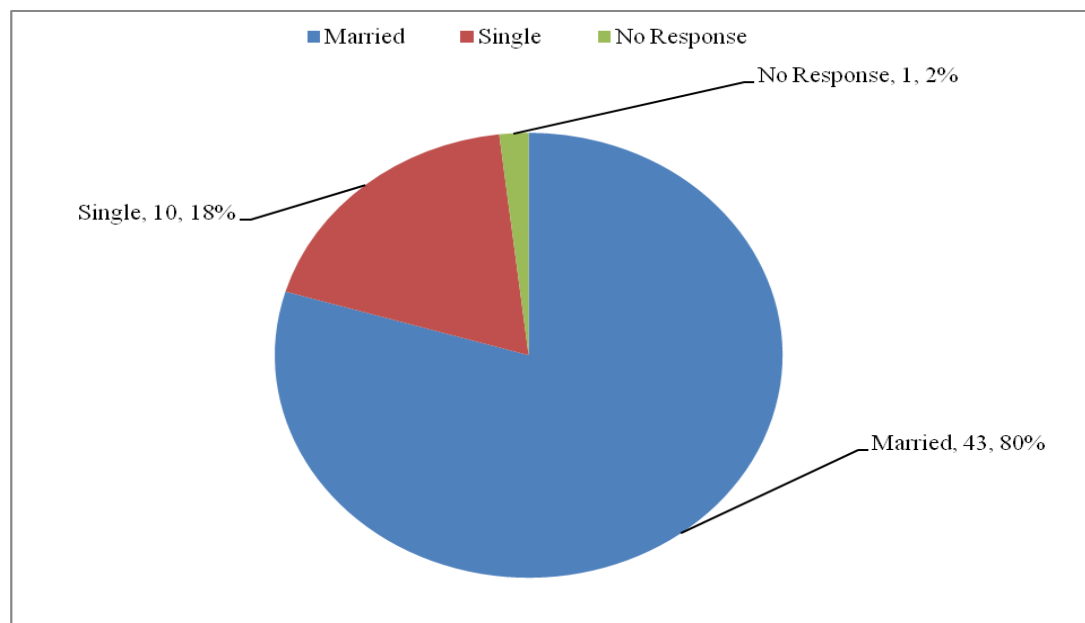
Figure 4.1: Marital Status (N=54)

Source: Field data (2012)

Figure 4.1; shows that 43 (79.6%) respondents are married, 10 (18.5%) are single, one (1.7%) respondent did not answer the question. As shown in figure 4.1, a majority of respondents are married.

4.2.4 Educational Qualifications of the Respondents

Information on educational qualification of the respondents is shown in Figure 4.2. As shown in Figure 4.2, four (7.4 %) respondents have doctorate degrees, 9 (16.7%) have Masters degrees, 30 (55.6%) have undergraduate degrees, 10 (18.5%) have diplomas. One (1.9%) respondent did not answer this question. The majority of respondents, thus, were educated and more likely to be ICT literate.
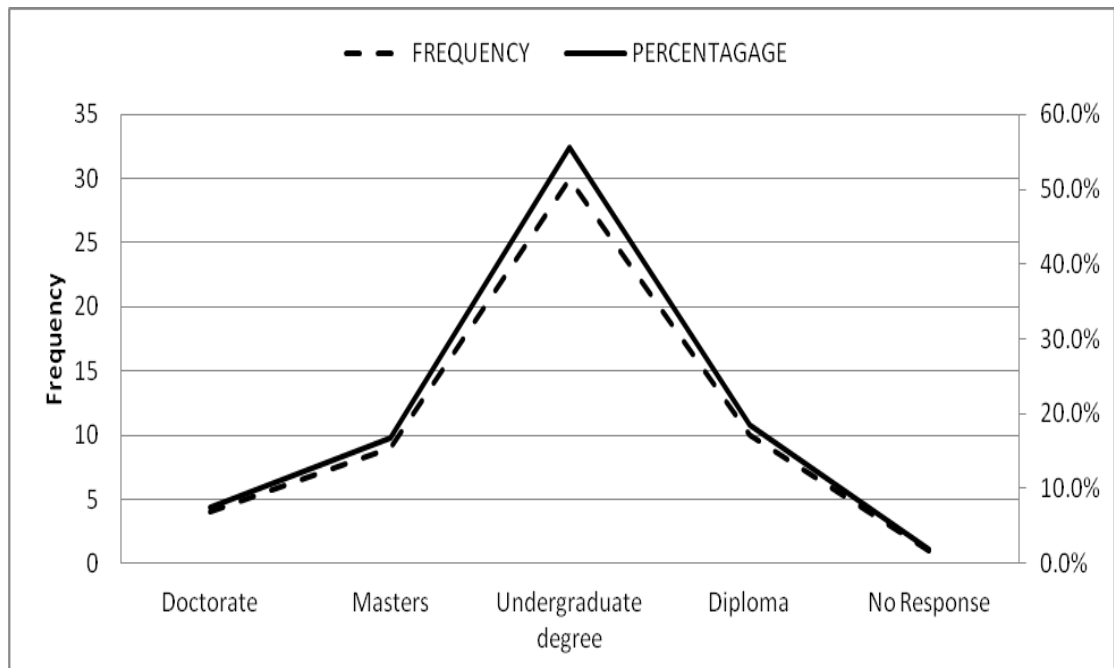
Figure 4.2: Educational Qualifications of the Respondents (N=54)

Source: Field Data (2012)

4.2.5 Duration in Employment

Table 4.3: Duration in Employment (N=54)

Experience in Employment	Frequency	Percentage
Less than 1 year	2	3.7
1-5 years	17	31.5
6-15 years	32	59.5
15+	4	7.4
Total	54	100

Source: Field Data (2012)

Table 4.3 presents responses according to their duration in employment. Experience in employment is an important factor and has a bearing on the competence of staff. Knowledge obtained in class or college becomes more meaningful, the more one puts ICT into practice. The table shows that 2 (3.7%) of the respondents indicated that they were in employment for less than 1 year, 17 (31.5%) respondents for

between 1 and 5 years, 32 (59.6%) respondents for between 6 and 15 years, while 4 (7.4%) respondents have been in employment for more than 15 years.

Therefore a majority of the respondents have been in employment for more than 5 years. This can be attributed to the fact that staffs are normally employed on permanent terms, or on contract terms, usually renewed after two years. They are also more secure at their jobs. Hence age and marital status help researcher to get more information about the respondent's profile, may also identify their ability to understand new services as the effort of BoT library transition from print to the access and use of e-resources.

4.3 Electronic Resources Available in the Library

The first research objective sought to find out the electronic resources available for users in the BoT library. The respondents were first required to indicate if they used the library.

4.3.1 Respondents' Visit to the Library

The respondents were first required to indicate if they use the library. All the 54 (100%) respondents indicated that they use the library. The researcher noted through observation that there were several library users in the library, which is an indication that the library is being used throughout the working hours. Table 4.4 shows average users who visit library "per day" (p/d). However the researcher makes his observation mostly to the respondents.

Table 4.4: Library Users' Daily Visit Statistics for the Month of July 2012

Date	Morning	Afternoon	Total
2/7/2012	17	6	23
3/7/2012	9	13	22
4/7/2012	11	15	26
5/7/2012	10	7	17
6/7/2012	14	12	26
1st Week	*61*	*53*	*114*
9/7/2012	18	13	31
10/7/2012	9	11	20
11/7/2012	12	4	16
12/7/2012	16	14	30
13/07/2012	6	18	24
2rd Week	*61*	*60*	*121*
16/07/2012	18	12	30
17/07/2012	11	10	21
18/07/2012	5	9	14
19/07/2012	7	15	22
20/07/2012	6	12	18
3rd Week	*47*	*58*	*105*
23/07/2012	28	11	39
24/07/2012	5	12	17
25/07/2012	17	13	30
26/07/2012	4	7	11
27/07/2012	5	4	9
4th Week	*59*	*47*	*106*
30/07/2012	11	15	26
31/07/2012	10	12	22
End of the Month	*21*	*27*	*48*
Grand Total:	249	245	494
MONTHLY AVARAGE:	11.32p/d	11.14p/d	22.45p/d

Source: Library Daily User's Statistics (2012)

4.3.2 Purpose of Library Visit

The respondents were asked to indicate why they visit the library. This was a multiple answer question. The findings are presented in Figure 4.3. The findings in shows a number of responses on why respondents visit the library. Figure 4.3 show that 48 (88.9%) of the visit the library to access reading materials, 30 (55.6%) said to borrow various documents, 51(92.5%) said to access the internet, 22 (40.7%)

respondents mentioned "Other", 33 (61.1%) said to access electronic resources, 5 (9.3%) to access photocopy and printing services, 9 (16.7%) said for entertainment, 6 (11.1%) said it is a convenient place to study, and 2 (3.7%) said to meet co-workers.
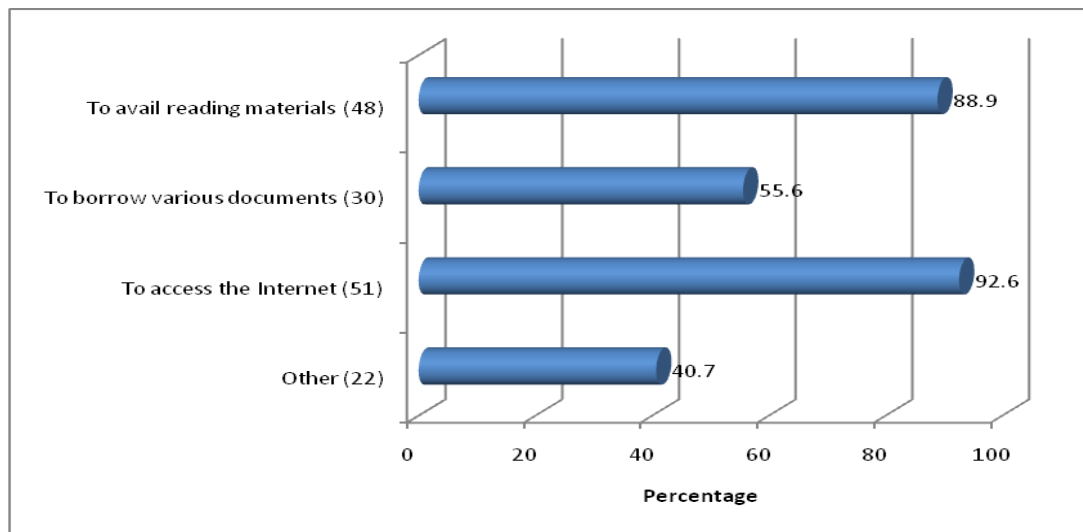
Figure 4.3: Purpose of Visiting the Library (N=54)
Source: Field Data (2012)

One of the responses mentioned is to read materials. The researcher noted through observation that the library had several shelves which were stocked with books and other reading materials, such as journals and reports. In this library there are about 40 titles of journals. To name some of them:

    i.   Accountancy

   ii.   Accounting and Business Research

  iii.   African Economic Research Consortium

  iv.   Econometrica

   v.   The American Economic Review

      vi.   Bank of Tanzania Annual Reports

     vii.   Economic Record

    viii.   Journal of Banking and Finance

     ix.   The Economic Journal

     x.   The journal of Business

     xi.   OECF Journal of Development Assistance

     xii.   Journal of Development Economics

    xiii.   Journal of Development Studies

    xiv.   Journal of Economic Literature

     xv.   Journal of Economic Perspectives

    xvi.   Journal of Economic Theory

    xvii.   Journal of Finance

   xviii.   Journal of Financial Economics

    xix.   Journal of Financial regulation and Compliance

     xx.   Journal of financial Markets

    xxi.   Journal of Marketing

    xxii.   Journal of Money Laundering Control

   xxiii.   Journal of Money, Credit and Banking

These are some of the journals available in print format but the BoT Library system have other journals in electronic format subscribed form the Emiraldinsight.com. The researcher also noted that there were other types of reading materials such as, dictionaries, encyclopaedias as well as Laws of Tanzania: Principal and Subsidiary Legislation. Other reference materials available in the library are:

     i.   Bank of Tanzania Annual Reports

ii. BoT Quarterly Economic Bulletin

iii. BoT Monetary Policy Statement

iv. Directorate of Banking Supervision Yearly Report

v. Financial Stability Report

vi. Monthly Economic Reviews

vii. Tanzania Investment Report

viii. Yearly Proceedings to the Conference of Financial Institutions (BoT)

Figure 4.4: A Section at Journals' Division of the Library

Source: BoT Library (2012)

To borrow documents is a major reason why respondents visit the library. BoT staff are the users of the library and the library is open during daytime when staff are at work. This means they get limited time to visit the library and so they tend to borrow

books so that they may read them at their convenient time.

Figure 4.5: Book Arrangement in the Shelf with Guide
Source: BoT Library (2012)

Another reason for visiting the library is to 'access the internet'. The researcher noted through observation that there were computers with internet connectivity in the library which facilitate access to the internet for library staff and users. The researcher was informed by the librarian that the computers were connected to local area network, facilitating the sharing of information between the library and other departments within the BoT headquarters.

According to the respondents the library is 'a convenient place to study', because it is a quiet place, where individuals pursuing academic educations can study. The above uses of the library are similar to those reported in others studies such as (Tenopir, King, Edwards, & and Wu, 2009) including to access print and non-print

books, journals, newspapers and other reading materials. And a place to meet colleagues. As such, the library serves more than being a place for accessing information.
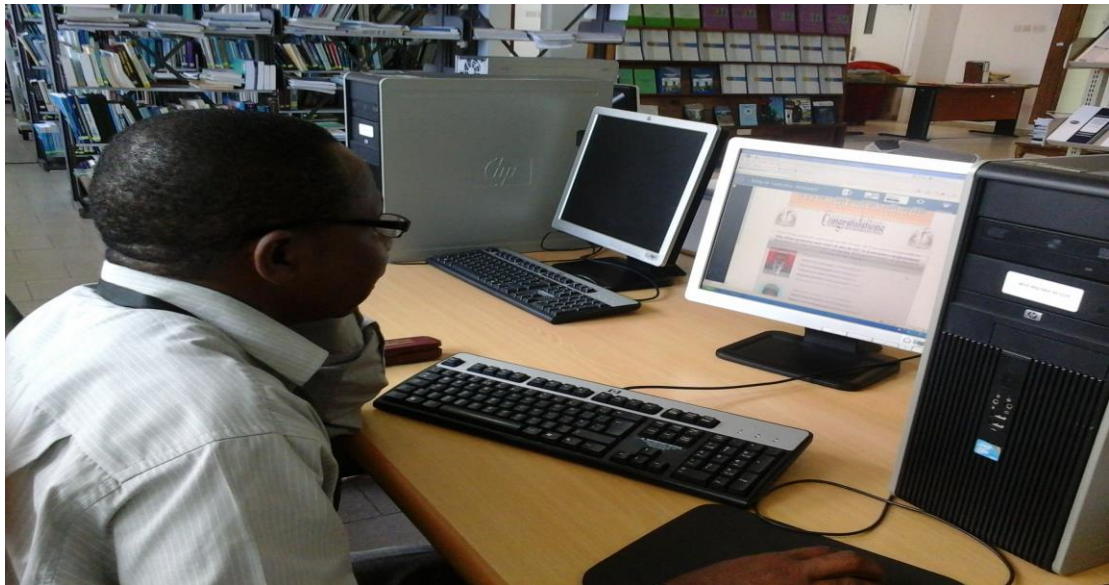
Figure 4.6: A Staff Accessing the Internet in the BoT Library

Source: BoT Library (2012)

Figure 4.7: A Digital Television Set for Library Users at BoT Library

Source: BoT Library (2012)

This digital television is used by staff to access information like breaking news, current news, documentaries and for a power point displays. Entertainment is another response mentioned by the respondents. The researcher observed that there were digital television panels, newspapers as well as magazines which attracted some library users to come to the library. The newspapers available were English and Swahili popular newspapers.

4.3.3 Knowledge on Electronic Resources Available in the Library

The respondents were further asked to indicate how they knew about electronic resources available in the library. This was a multiple response question. The replies are shown in Table 4.5

Table 4.5: Knowledge on the Existence of Electronic Resources (N=54)

Response	Frequency	Percentage
From the librarian	25	46.3
From a friend/colleague	30	55.6
Through the Local Area Network	22	40.7
Through brochures and leaflets	8	14.8

Source: Field Data (2012)

Table 4.5 shows that 25 (46.3%) respondents indicated that they knew about electronic resources, 30 (55.6%) respondents indicated that a friend or colleague told them about electronic resources available in the library, 22 (40.7%) respondents indicated that they knew about electronic through the LAN, and 8 (14.8%) indicated that they know about electronic resources through brochures and leaflets.

The findings show that majority of respondents became aware of electronic resources found in the library from a variety of sources including friends or a

colleagues, librarians, the LAN or brochures and leaflets. The findings show that e-marketing is not given priority as a tool for promoting access to and use of e-resources in the surveyed library. During interview with librarians the researcher was told that plans were underway to ensure that marketing of e-resources is done electronically rather than through print sources for current awareness purposes.

Moreover, the librarian told the researcher that staffs are supposed to use the LAN to access the library's database where they can search for any materials, in either electronic or print format. The findings of this study somewhat coincide with those by Tenopir, King, Edwards, & and Wu, (2009) who found that awareness on the availability of electronic resources is also promoted by the efforts of the library consortia. The purpose of such bodies, among others, is to create awareness and encourage the usage of electronic resources, Jaeger, McClure, & and Bertot, (2005). However, for the case of Tanzania. The consertia is in its infanfancy stage and is yet to embark on realy awareness of resource available. Therefore, there is a need to strengthen COTUL to cater for this purpose.

4.3.4 Electronic Resources Available in the Library

The respondents were asked to indicate electronic resources that are available in the library. The responses are presented in Figure 4.8. The findings show a number of electronic resources available in the library as indicated by the respondents. For example electronic books were mention by 30, (55.6%), electronic journals 24, (46.3%) of the respondents, online databases by 30, (59.3%), search engines by 36, (66.7%), and CD ROMs by 4, (9.3). Only 2, (5.6%) mentioned "Others", indicating electronic magazines, electronic newspapers and institutional websites.
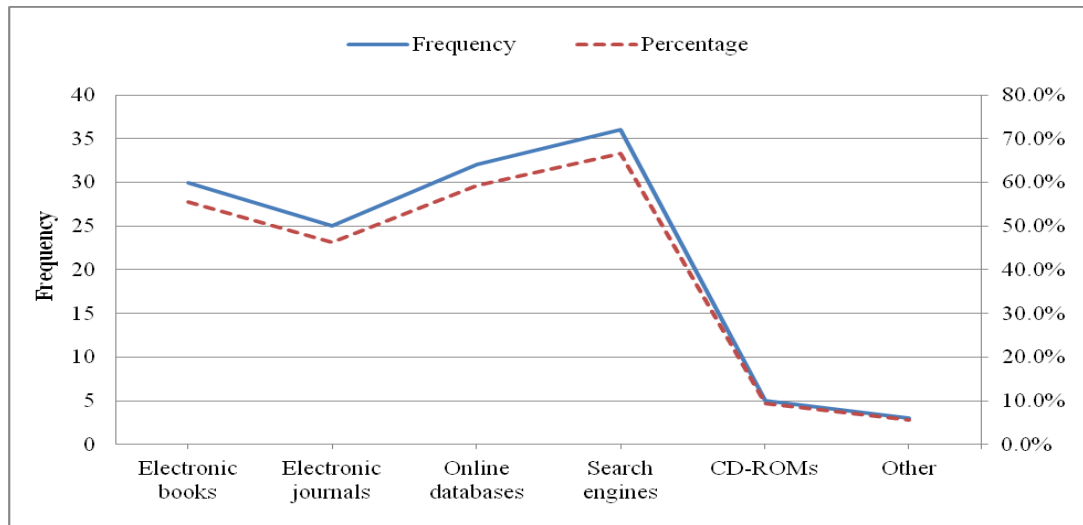
Figure 4.8: Electronic Resources Available in the Library (N=54)

Source: Field Data (2012)

From the findings, it can be concluded that the respondents are aware of various electronic resources available in the library. The researcher was informed by the librarian through interview that the library contained books not only in print format, but also in electronic format. Print books on the shelves and can be accessed through browsing, but electronic books require computers to access, as well as the necessary search skills. The same applies for other resources in electronic and print formats, such as electronic journals, electronic magazines and electronic newspapers and print materials.

The findings, also revealed that some of the respondents are not aware of electronic resources obtained in the library, and this is a challenge for librarians in that they need to market these resources. During interview with librarians and through personal observations, the researcher noticed the use of various electronic resources by user in the library through computers connected to the internet. Figure 4.5 shows

one of the websites which users can browse through the BoTL 'Liberty5 Library Management system'.
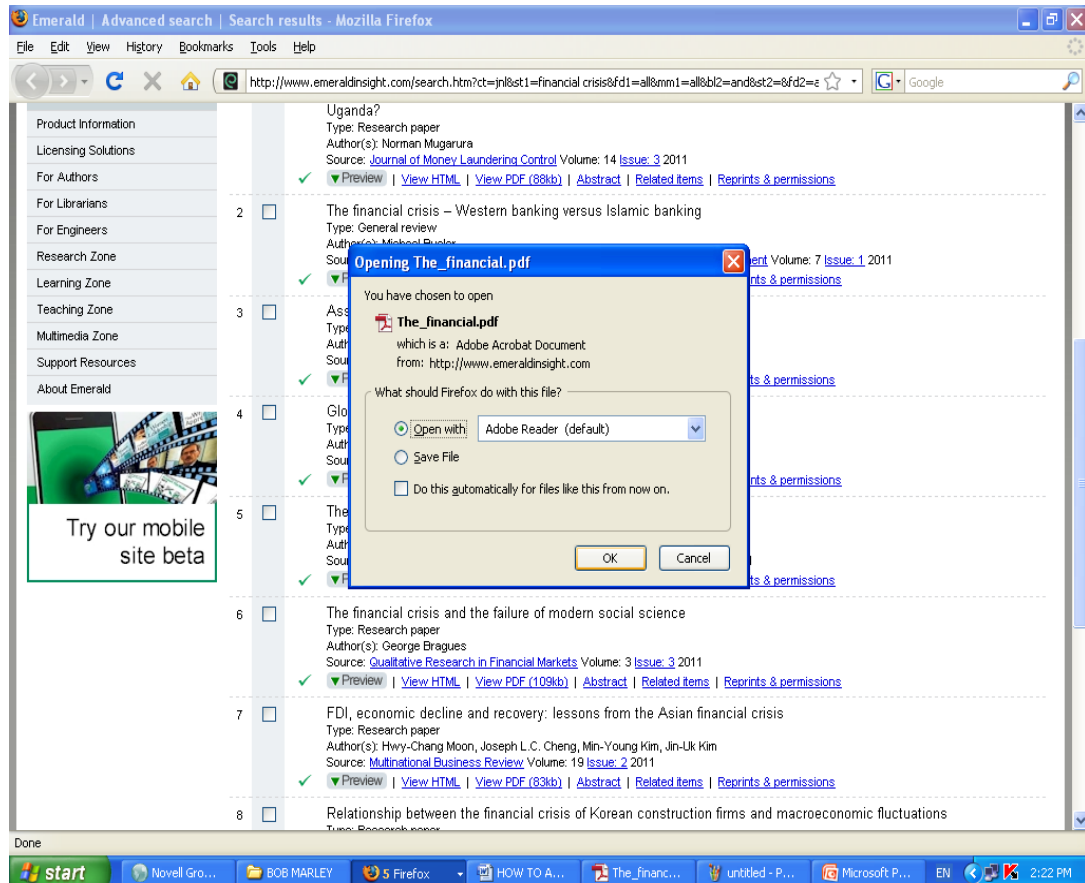
Figure 4.9: Electronic Database Accessed on Computers at BoT Library

Source: BoT Library (2012)

Figure 4.9 show one of the web page 'emeraldinsight.com' an online e-resource subscribed to by the BoTL that staff can access and retrieve materials from.

4.3.5   The Level of Access to and Use of Electronic Resources at BoT Library

The second objective sought to find out the level of access and use of electronic resources at BoT Library. The respondents were required to indicate electronic resources they use in the library. The findings are presented in Figure 4.10.
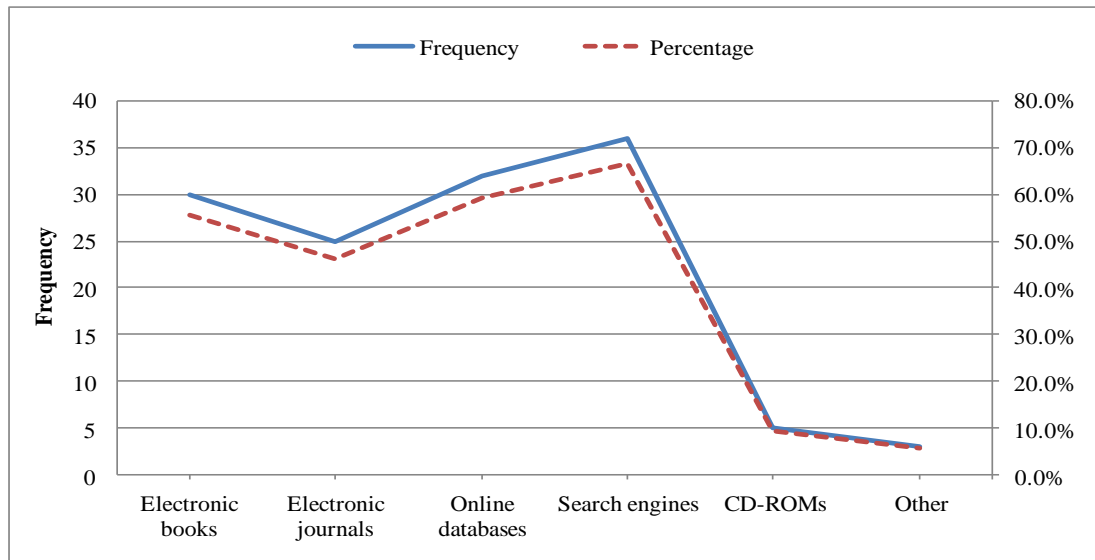
Figure 4.10: Electronic Resources Used in the Library (N=54)

Source: Field Data (2012)

The findings in Figure 4.10 show a wide range of responses from the respondents on electronic resources they access in the library. For example 16, (31.4%) mention electronic books, electronic journals 7, (14.8%) mention, online databases 9, (37.0%), search engines 27, (53.7%), CD ROMs, e-mail 6, (22.2%), social network sites 4, (9.3%), as well as the OPAC 4, (9.3%). The findings show that generally, majority of respondents do not effectively use electronic resources available in the library. For example, although electronic books are available and can be accessed in the library through computers connected to the internet, few respondents indicated accessing and using them. Few respondents access journals, for academic purposes rather than in the carrying out of the day to day activities.

The findings revealed that some respondents use e-mail in the library but most of them can access e-mail from their offices desktops or mobile phones. The researcher noted through observation that some library users were using e-mail for personal or

business purposes. The researcher also noted that some users switched to e-mail after they had met or failed to meet their information needs. There are some respondents who indicated that they access social network sites in the library. A social networking service is an online service, platform, or site that focuses on facilitating the building of social networks or social relations among people with shared interests, activities, backgrounds, or real-life connections.

Social networks such as Facebook and Tweeter have become popular in the digital age. The researcher noted through observation that some library users were accessing social network sites. Accessing these sites may become beneficial at the workplace only if they are used for marketing purposes, as many companies all over the world are making heavy use of social network sites to make their presence and products be known. Libraries can also take opportunity of social network sites to market their products and services.

The findings also reveal that few respondents use the OPAC. The researcher also observed that there are electronic catalogue access points in the library, and yet many library users preferred to browse the shelves when they needed to access any reading materials in the library. As a result, they wasted much of their time in locating materials they needed. The researcher was informed during interview that although access to computers and e-resources for users is free, there is low usage of electronic resources due to the fact that most library users prefer print resources. Moreover, most library users also access electronic resources in their offices, at home or through mobile phones.

The low usage of electronic resources can also be attributed to the nature of work done by most respondents and heavy reliance on print resources. For example Thivant, (2005) observed that the use of electronic resources in the libraries in banks is highly influenced by the nature of work as well as professional activities. However, economists and business analysts in the banking sector prefer to use electronic resources because they are current and convenient. According to Rao (2004), e-resources have several advantageous over print resources not only because a copy can be accessed by multiple users in different locations at the same time, but also because they can be accessed without time and distance limitations, and can be easily be retrieved using keyword searching e-book reader, PDA, or mobile phone. According to LJ/SLJ (2010), e-resources do not wear out and are not easily damaged, and cannot be misplaced and do not require physical storage space.
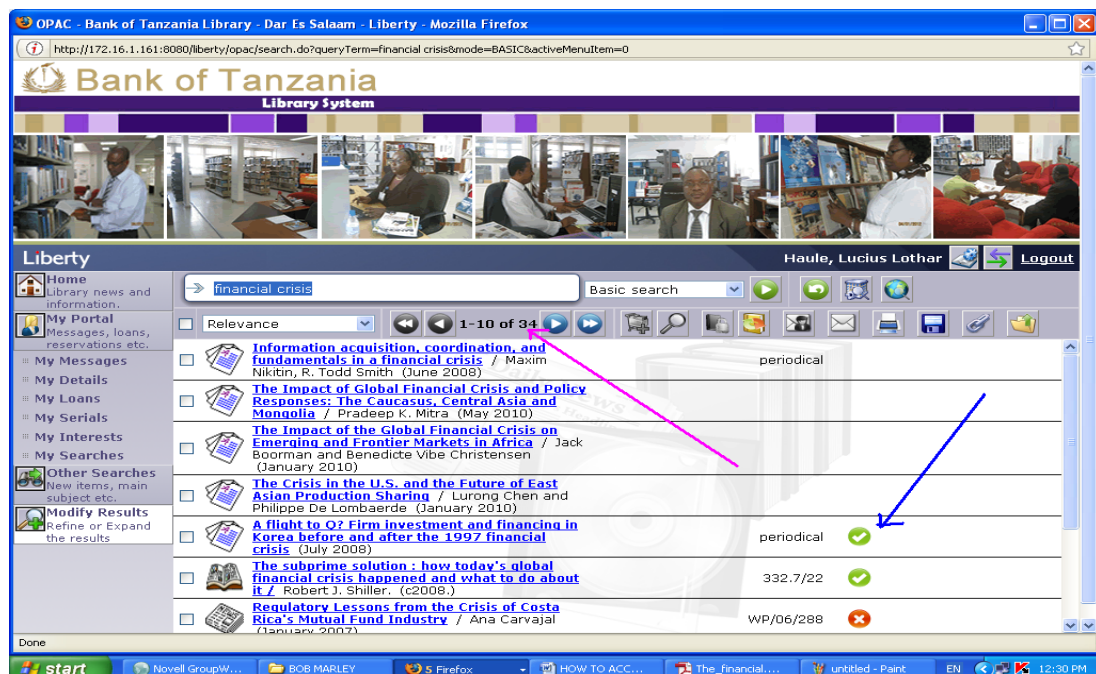
Figure 4.11: The Online Public Access Catalogue of the Bank of Tanzania Library

Source: BoT Library (2012)

The reason why e-books are unpopularity among the respondents has been explained by Anuradha and Usha (2006) who observed that library users were not happy about using e-books because of incompatibility of e-books from different sources; lack of awareness or demand for e-books, unfamiliarity with e-book technology; and due to unfriendly interfaces. Most users prefer to access e-journal because they contain current materials as shown in Figure 4.9.

Figure 4.9 also shows that BoT library 'Liberty library management system'. The red arrow indicates the number of 'periodical/ journals articles' per page while the blue arrow shows the format of the e-resources displayed in alphabetically order. The green ticks show that the 'periodical/journal' is available and the red x show that the item is available.

4.3.6   Purpose of Using Electronic Resources

The respondents were further asked to indicate why they access and use electronic resources. The findings are presented in Figure 4.12. The findings in Figure 4.12 show various reasons on why the respondents use electronic resources. For example: 21 or (38.9%) of the respondents said for study, 16 or (29.6%) of the respondents said for research, 6 or (11.1%) said for teaching, 11 or 20.4%) indicated the "Other". Category, 10 (18.5%) said for related purposes only 1 or (1.9%) said for entertainment. The findings show that the respondents use electronic resources mainly for office and academic purposes. The researcher noted that library's main collection contained textbooks which were organised according to major academic disciplines, to foster the study environment. The textbooks can be located through the use of the Online Public Access Catalogue (OPAC), in the library. Currently,

acquistion is geared forward strengthening the electronic collection in major academic disciplines to ensure access to an unlimited number of electronic resources which are not bound by time or geographical barriers.
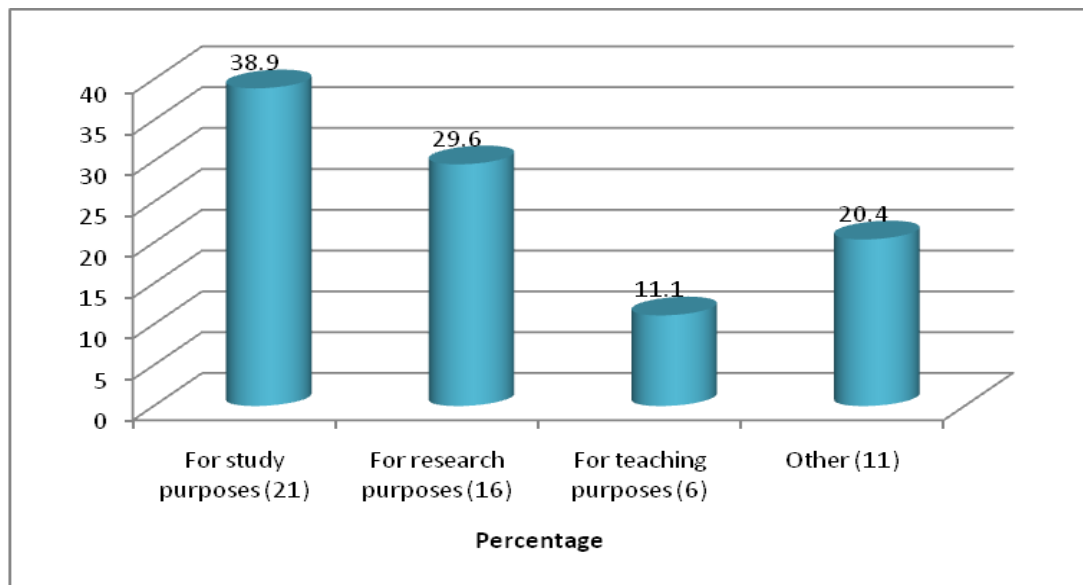
Figure 4.12: Purpose of Using Electronic Resources (N=54)
Source: Field Data (2012)

In this study 16 or 29.6% of respondents indicated that they use electronic resources for research. Internet contains voluminous information that is of great value to scholars are researchers. BoT library has access to a wide range of valuable scholarly electronic databases for research. Therefore researchers should take advantage of available electronic resources in the BoT library. These findings corroborate with similar discoveries done by Singh, (2006) who found that users in special libraries opt for electronic resources for work accomplishments, academics and research.

4.3.7 Usefulness of Electronic Resources

The respondents were asked to indicate if they think electronic resources are useful. This question was asked because traditionally, library stock print resources, and

electronic resources are a new phenomenon especially in developing countries. They were supposed to rate usefulness in terms of, 1. "Very Useful", 2. "Useful", 3. "Uncertain", and 4. "Not Useful". The findings are presented in Table 6 bellow:

Table 4.6: Usefulness of Electronic Resources (N=54)

Category	Frequency	Percentage
Very useful	29	53.7
Useful	21	38.9
Uncertain	3	5.6
Not useful	1	1.9
Total	54	100

Source: Field Data (2012)

The findings in Table 4.6 show that 29 (53.7%) respondents indicated that electronic resources are 'very useful', 21 (38.9%) said 'useful and only 1 (1.9%) respondent said "not useful", while 3 (5.6%) respondents were 'uncertain'. The findings, therefore, show that majority of respondents are of the opinion that electronic resources are useful. This can be attributed to a number of factors, such as accessibility, regardless of time or geographical barriers, are faster retrieval compared to print resources.

According to Tao, (2008) the usefulness of electronic resources can be attributed to the perceived usefulness of e-resource and ease of use. However, when the respondents were asked to indicate whether they think electronic resources are preferable compared to printed resources, 14 (25.9%) of the respondents said "Yes", 12 (22.2%) respondents said "No", and 30 (55.6%) respondents were "Uncertain". The findings, therefore, show that although majority of respondents consider electronic resources to be very useful, yet they cannot state with full certainty that

they are better compared to print resources.

4.3.8   Competence in Searching Electronic Database

Effective use of electronic resources requires that users have skills in search techniques. The respondents were required to rate their electronic database search skills. The findings are presented in Figure 4.13.
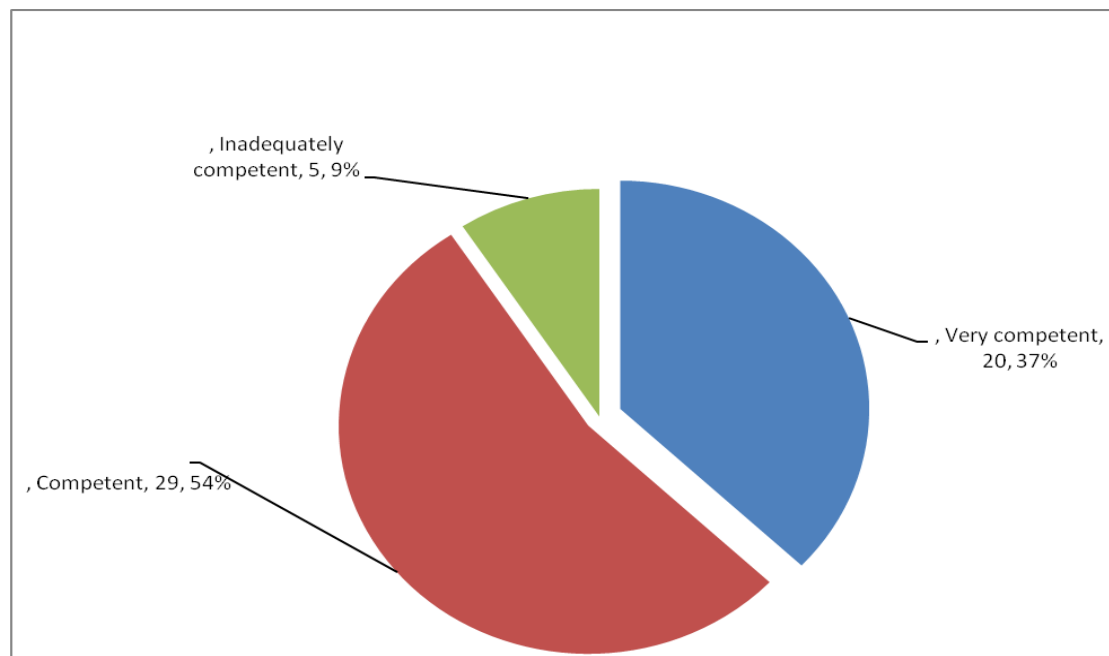
Figure 4.13: Competence in Searching the Electronic Database (N=54)

Source: Field Data (2012)

The findings in Figure 4.13 show different levels of competence by the respondents, where 20 (37.0%) respondents rated themselves as being very competent. In search skills 29 (53.7%) rated themselves as competent, and 5 (5.1%) rated themselves as being not competent. The researcher also found that BoT library has no organized information literacy Programmes, a library orientation programme, but library users are given guidance whenever need arises. For example, the researcher noted through

observation a library user being given guidance on how to search the OPAC to access reading materials in the collection. Information literacy skills in this regard play a major role in enabling users to access and use information sources of all kinds (Forster, 2013).

4.4 Manner of Acquisition of Computer and Internet Use Skills

Effective use of the internet requires that users be competent in using the internet. Respondents were asked how they acquired computer and internet use skills. This was a multiple response question. The findings are presented in Table 7 bellow.

Table 4.7: Acquisition of ICT Skills among Library Users (N=54)

Response	Frequency	Percentage
Through attending a formal course	13	24.1
Through attending workshops and seminars	26	48.1
IT knowledge was part of school curriculum	9	16.7
Through assistance by colleagues	11	20.4
Through trial and error	15	27.8
Through librarian's assistance	2	3.7

Source: Field Data (2012)

The findings in Table 7 show a number of ways in which the respondents acquired computer and internet use skills. For example 13 (24.1%) said "through formal courses' 26 (48.1%) "Through attending workshops and seminars" 9 (16.7%), said through 'IT knowledge was part of school curriculum' 11 (20.4%), said 'through assistance by colleagues' 15 (27.8%), 'through trial and error' and 2 (3.78%) said "through librarian's assistance'.

However, librarian's assistance was mentioned by very few respondents, in spite of the fact that librarians have to play a key role in making library users become more

competent in using computers and specifically searching the internet. The researcher learned that BoT librarian do not teach users information literacy skills and that there is no library orientation for new users. However, library users can get assistance if they ask. For example, the researcher noted through observation a library user being given assistance by a librarian on how to effectively search the OPAC, and how to locate of reading materials in the collection.

This observation concurred with research conducted by (Zanin-Yost, 2013) who attributed the lack of information literacy training in special libraries to the nature of library users, institutional support and the availability of resources for access by users. Although in our library it is a bit different where a lot of staff can manage to do search by themselves, that is because is an institution library with staff/ users who have skills in computers and the internet surfing.

4.5 Challenges Faced in Accessing and Using Electronic Resources

The third objective sought to find out the challenges users face in accessing and using electronic resources. The findings in Table 4.8 show a number of challenges hindering respondents access and use of electronic resources including "inadequate computers with internet connectivity", as indicated by 30 (55.6%) of the respondents, the "unaware of electronic databases available", as indicated by 35 (64.8%) of the respondents, "limited access to online databases", as indicated by 13 (14.1%) of the respondents. The "inadequate search skills", as indicated by 40 (74.1%) of the respondents, "occasional network failure", as indicated by 8 (14.8%) of the respondents, "information overload), as indicated by 3 (5.6%) of the respondents, and "time constraints", as indicated by 11 (20.4%) of the respondents.

Table 4.8: Challenges Faced in Accessing and Using Electronic Resources (N=54)

Response	Frequency	Percentage
Inadequate computers with internet connectivity	30	55.6
Unaware of electronic databases available	35	64.8
Limited access to online databases	13	14.1
Inadequate search skills	40	74.1
Occassional network failure	8	14.8
Information overload	3	5.6
Time constraints	11	20.4

Source: Field Data (2012)

One of the challenges mentioned is inadequate computers with Internet connectivity. It was attributed to inadequate library space. The BoT library has a hybrid collection of both print and electronic resources, and most library space is occupied by the print collection which keeps growing and taking much space over time. Given this, there is a need for BoT library to create a collection development policy to guide collection development of it print and non-print materials. A collection development policy would also facilitate weeding of library materials when need arises and this could create more space for more computers.

Low level of awareness regarding the benefit of electronic databases available is one of the major challenges mentioned. This can be attributed to poor marketing. This problem has also been reported in other studies such as Kavulya, (2004) who argue that marketing of library services in general is attributed by poor marketing strategies by librarians. As such Babafemi (2002) notes that however much libraries respond to the needs of its users, marketing of such services is an important added value. Low level of awareness can result into underutilization of e-resources and facilities subscribed to or paid for by the institution. The librarians must ensure that

they use effective marketing strategies to promote increased use of e-resources by library users.

Inadequate search skill is another challenge was also mentioned by the respondents. Lack of skills can result into an information seeker failing to get what he or she wants, or spending too much time to locate information needed. Therefore librarians must ensure that they conduct information literacy training for library users. When library staffs were interviewed, they told the researcher that there were various factors that hampered effective use of e-resources available in the library. The major ones mentioned include time constraints, lack of awareness on the wide range of e-resources accessible in the library, and inadequate search skills. These findings concur with those by Rosenberg, (2006) who concluded that much as university libraries in Africa provide their users with online resources inadequate facilities for access and limited use skills tend to have a negative impact on their use.

4.6 Views on How to Improving Access to and Use of Electronic Resources

The fourth objective sought to solicit views from the respondents on improve access to and use of information resources at BoT Library. Table 4.9 shows various responses given by the respondents on how to improve access and use of e-resources. For example 33 (61.1%) said "increase the number of computers with internet access", 40 (74.1%) said "create awareness of available online resources", of respondents, 43 (79.6%) said "train users with information search skills", 8 (14.8%) said "increasing the number of qualified library staff", 5 (9.3%) said "upgrading internet speed", and 2 (3.7%) said "review BoT ICT policy".

The researcher was informed during interview by library staff that efforts were underway to ensure effectiveness in provision of library services through improving collaboration with other libraries so that access to learning resources in other libraries through the internet may be possible, and also prioritising in imparting information literacy skills to library users as well as creating awareness of the available e-resources accessible through the library. Moreover, to address the problem of shortage of time to visit the library, it is now possible for library staff to access the library's OPAC from their offices, and also, efforts are underway to ensure that the e-resource collection is accessible to staff at their offices and elsewhere through usernames and passwords.

Table 4.9: Strategies to Adopt to Improve Access and Use of Electronic Resources (N=54)

Response	Frequency	Percentage
Increase the number of computers with internet access	33	61.1
Create awareness on available online resources	40	74.1
Train users with information search skills	43	79.6
Increasing the number of qualified library staff	8	14.8
Upgrading Internet speed	5	9.3
Review BoT ICT policy	2	3.7

Source: Field Data (2012)

4.7 Summary

This chapter presented and analysed data collected for this study. The findings revealed that access to and use of e-resources in the BoT library is on the rise but with same difficulties because more respondents are not computer literate. Other problems facing the access and use of electronic resources in the BoT library may be similar to another library that follows these same method of using ICT in the

provision of e- resources as; awareness on available online resources to their users. Also these kind of library should have very capable staff to upgrade the internet speed and having they own information technology policy. By solving these kinds of problems, user will benefit through the use of electronic resources for their works.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The main purpose of this study was to investigate accessibility and use of electronic resources at BoTL. This chapter presents the summary, conclusion, recommendations and areas for further study.

5.2 Summary

Findings of this study revealed a number of electronic resources accessible in the library as indicated by the respondents, including electronic books, electronic journals, online databases, search engines as well as CD ROMs. Other resources mentioned include electronic magazines, electronic newspapers and institutional websites. From the findings, it can be concluded that 40 (74.1%) of the respondents are aware of various electronic resources available in the library. However, 35 (64.8%) of the respondents who are not aware of the electronic resources in the library, and this posed a challenge to their effective use by the library users. There is a need not only to increase the range of electronic resources available to library users, but also to employ effective marketing strategies to maximize use of electronic resources by library users.

Findings related to the level of access and use of electronic resources at BoT library revealed that while in the library, the respondents accessed and used electronic books, electronic journals online databases, search engines, CD ROMs, e-mail, social network sites, as well as the electronic catalogue (OPAC). Furthermore, the findings showed that generally majority of respondents do not effectively use the

electronic resources available in the library, as noted by fewer respondents who used e-books, e-journals, and online databases. The major explanation can be attributed to be lack of awareness of the e-resources available that are very useful in meeting the information needs of the library users, as well a library is reputation is judged by the number and quality of resources stocked.

This view of those who do not use e-resources is now becoming outdated due to the internet which makes it possible for a library's collection to expand beyond the physical library space. Fortunately, as shown in Figure 4.11. indicates 27 (53.7%) of respondents use instead internet in place of print material. What is needed therefore is to ensure that e-resources are accessible and users are made aware of their availability, and then imparting users with information search skills to enable them to effectively locate and retrieve relevant resources they need. It was revealed in the findings that respondents use electronic resources for various purpose, including job-related purposes, study, research purposes, teaching and entertainment. There is a need in the library policy to ensure that information needs for library users are clearly identified so that the e-resource collection reflects the needs of various categories of its users.

The findings on challenges users face in accessing and using electronic resources include: inadequate computers with internet connectivity, low level of awareness of electronic databases available, limited access to online databases, inadequate search skills, occasional network failure, information overload, as well as time constraint. There is a need to ensure that the issues raised are addressed by the parent institution/ organization management to oversee the development of such library in

increasing the range of e-resources that can be accessed by library users and awareness creation on available electronic resources, as well as introducing in information literacy Programmes.

On strategies for improving access and use of electronic resources include: increasing the number of computers with Internet access, increasing awareness, marketing and promoting of available online resources, imparting users with information search skills, increasing the number of qualified library staff, upgrading Internet speed, as well as creating a favourable Institutional ICT policy. It is also important to take into consideration endorsements made by the respondents on the need to improve access and use of e-resources by library users.

5.3 Conclusion

As the concern of this study was to investigate 'challenges of accessibility and use of electronic resources in the library services in Tanzania: the case of the BoTL. This research revealed various purposes for which respondents like to use e-resources that include job-related purposes, study and research purposes. Respondents noted number of barriers that slow down the process of access and use of electronic resources in the library as inadequate computers, internet connectivity and speed, and lack of teacher librarian or guidelines.

Therefore there is a need to ensure that all parent institutions or organisations consider accordingly the wellbeing and growth of library by maintaining the standard as was proposed by the respondents and library staff by given attention in effect to improve access and use of electronic resources in library. Library should

conduct regular short trainings to its users to guide them on the proper user of computer, internet and on how to make specific search and browsing the websites. Hence the librarians themselves required to attend to special courses on managing electronic resources and how to make its collection development related to the needs of the library users. They should make their database interface a user-friendly without too much passwords in continuous searching that will attract more users to access and use electronic resources to such system frequently.

5.4 Recommendations

Based on the study findings, the following are recommended to parent institution management:

i.   Increasing the range of e-resources available, BoT should provide adequate funding for subscription of e-resources databases. E-resource collection should reflect information needs of library users.

ii. Library policy, BoTL should create its own library policy rather than depending on the organization-wide policy. The library policy may not depending on the organization-wide policy that will minimize the standard level of library usage. The policy should provide guidelines on e-resources collection development, acquisition and use. The Bank of Tanzania Library have a draft of its policy awaiting the Bank management to approve and allowed to take its place in the library.

iii. Awareness creation, the BoTL should market and publicize its e-resources databases to ensure utilization of e-resources collections.

iv. Information literacy skills. BoTL librarians should introduce information

literacy training for library users to enable them acquire search and retrieval skills.

v.   Training and retraining, BoT librarians should be trained and retrained in order cope with the changing information environment skills of library staff including information literacy skills so that they may learn new techniques on the access and use of e-resources. In addition, they should be provide with opportunities to attend both long and short term courses including professional workshops and conferences that will provide guidelines on matters related to staff information development.

5.5   Areas for Further Study

This study focused on the challenges of accessibility and use of electronic resources at Bank of Tanzania Library Headquarters in Dar es Salaam. There is a need to conduct a similar study on financial institutional libraries in Tanzania to determine challenges they face and determine their information needs and other libraries in Tanzania. Moreover, there is a need to conduct a study on information needs of special library users, focusing on financial institutions.

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APPENDICES

Appendix I: Questionnaire for BoT Officers (Library Users)

I am a student of The Open University of Tanzania, pursuing Masters Degree in Information Studies. I am conducting a research on the *Accessibility and Use of Electronic Resources in Library Services in Tanzania: The Case of the Bank of Tanzania Library.* I request you to fill this questionnaire and promise that the information you provide will be used for academic purposes only and not otherwise. Please have my many thanks in advance.

Kindly fill in the blanks or tick where applicable

1. Gender

       (i). Male   □

       (ii).Female □

2. Age

       (i). Below 30 years   □

       (ii).31-49 years   □

       (iii).50-59 years   □

3. Marital status

       (i). Married   □

       (ii).Single   □

4. Level of Education

       (i). Doctorate   □

       (ii).Masters   □

       (iii). University degree   □

       (iv). Diploma   □

       (v). Other   □

5. Occupation (please mention) --

   ----

6. Experience in Office

       (i). Less than 1 year   □

       (ii). 1-5 years   □

       (iii). 6-10 years   □

       (iv). More than 10 years   □

7. Do you use/visit the BoT library?

       (i). Yes   □

       (ii). No   □

8. If the answer is 'yes', proceed with question 9. If the answer is no, give reasons---

   ----

   ----

9. For what purpose do you visit the BoT library?

   (i). To avail of reading materials   □

   (ii). To borrow various documents   □

   (iii). To access the Internet   □

(iv).   Other (please mention) ---

(v).   10. What electronic resources are accessible in the library? Please mention

them --

----

15. Where else can you find related services of such electronic resources? ----

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----

16. Where do you hard about us? --

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17. Do you have adequate skills to search electronic resources?

(i). Yes   ☐

(ii).No   ☐

18. Do you think electronic resources are preferable compared to printed resources?

Please explain---

----

19. Mention the problems that hamper access and effective use of electronic

resources at the BoT Library--

----

20. What are your views on ways increasing effective use of electronic resources by

BoT staff at the BoT Library?---

Appendix II:Interview Guide For BoT Library Management Staff

(1) What ICT facilities are available in the library for access by library users?

(2) What electronic resources are available or accessible within the library for access and use by library users?

(3) Do library users take advantage of the electronic resources available in the library?

(4) What strategies are used to make library users be aware of electronic resources available?

(5) What strategies are used to make library users become competent in accessing and using electronic resources?

(6) Are there any challenges that hinder access and use of electronic resources by library users?

(7) What is being done to increase access to and use of electronic resources by library users?

Appendix III: Observation Guide

During observation in the library the researcher took note of the following:

(1) Availability of ICT facilities in the library, including their adequacy

(2) The electronic resources available in the library, such as CD ROMs and the

Electronic catalogue.

(3) Use of electronic resources by the library users

(4) Any challenges that library users face in accessing and using electronic resources

in the library.