# Exploring E – Library Challenges in the North East of Nigeria Tertiary Institutions Library

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## ABSTRACT

Even though Information and Communication Technologies (ICTs) brought about development in the Tertiary Institution's Libraries, it equally became an indispensable tool for better services to its clientele. However, there are numerous challenges faced by these Libraries in adoption of E-Library services. This study explored E-Library challenges in the North East of Nigeria Tertiary Institutions Library. Purposeful sampling technique was used for the study and a combination of interview and observation was used to collect data from the participants. The major findings of the research was that, lack of manpower, ICT literacy among library staff, lack of constant power supply among others are the major challenges in those libraries. The researcher recommended that, Technical, physical and intellectual infrastructure must be developed to facilitate e-library in the study area, the Librarians have to be proactive in nature to meet up with the existing trend of the 21$^{st}$ century among others.

**Keywords: E-Library challenges, Information and Communication Technology (ICT), Tertiary Institutions, Virtual Library, Digital Library**

## 1.        Introduction/Background to the Study

Information and Communication Technologies (ICTs) has revolutionized the role played by Libraries and other similar institutions in Nigeria. For Libraries therefore to maintained its users and add value to its services there must be a paradigm shift and adoption to this technology. ICT have been defined by different researchers according to their views, Yusuf (2007), described ICT as an electronic technology used for accessing, processing, gathering, manipulating, presenting and communicating information. While Obanya (2002) is of the view that information communication technology is a broad concept that has to do with the harnessing of the process, the methods and the product of electronic and communication related technologies (and other related resources in today's knowledge – driven society), for enhancing the availability, the spread and efficiency of a set of programmed activities geared toward the achievement of clearly defined goals. In a nut shell therefore, ICT in Libraries provide easy processing, managing and access to wealth of information resources. It also helps to achieve the set desired goals and objectives of the Library.  e – Library as a concept is used interchangeably with digital Library and Virtual Library.  Elementarily, e-library can be said to be traditional library in electronic format. Wikipedia defines e – Library also known as "virtual library" as

> "As focused collection of digital objects that can include text, visual material, audio material, video material, stored as electronic media formats (as opposed to print, micro form or other media), along with means for organizing, storing and retrieving the files and media contained in the library collection. Digital library can vary immensely in size and scope, and can be maintained by individuals, organizations, or affiliated with established physical library buildings or institutions, or with academic institutions. The electronic content may be stored locally, or accessed remotely via computer networks. An electronic library is a type of information retrieval system".

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The cost implication in establishing e-library is highly capital intensive and the concept is relatively a new one, it is in view of these that TETFund in its intervention emphasized on digitization of libraries. The Tertiary Education Trust Fund (TETFund) formally known as Education Trust Fund (ETF) was established by act No. 7 of 1993 as amended because education was starved of funds and infrastructure had deteriorated so badly in all educational institutions. This law empowered the then ETF to intervene in all public Primary, Secondary and Tertiary institutions. In 2011, Act No. 7 was replaced and substituted with Act No. 16 which created TETFund and was refocused to intervene only in public tertiary institutions which section 20 of the Act defines as "**a University, a Polytechnic or a College of Education".** The specific mandate of the Fund as provided in section 7 (1) of Act No. 16 is to:

"…disburse the amount in the Fund to Federal and State Tertiary Educational institutions specifically for the provision or maintenance of –

- Library Development Intervention
- Essential Physical infrastructure for teaching and leaning
- Research and publication, among other thing

It was advice by TETFund that beneficiaries earmark part of their allocations for Library intervention for e – Library in order to keep up with the current trend (TETFund, 2014).

## 2. Scope and Limitation of the Research

The scope of this research covered Polytechnics and Colleges of Education Libraries in North East, Nigeria. A major limitation in a study of this nature was that, the researcher couldn't be able to cover all the States in the said zone, due to time frame.

## 3. Statement of the Research Problem

Information and Communication Technologies (ICTs) brought about great challenges and development in the means of disseminating information (channel of communication) during the 20th century. These challenges positively affected the services rendered by Libraries in Nigeria; the traditional Libraries are therefore not left out. It became paramount to these institutions (Libraries) in order to maintain its clientele and status quo to adapt these changes.

Similarly, the implementation of E-Library is highly Capital intensive, TETFund in its mandate to develop Libraries in tertiary institutions of Nigeria through library development intervention emphasized on digitization. However, whether these libraries have achieved the level of digitization by the said fund or otherwise remain unknown to the researcher.

This situation of empirical uncertainty in regard to the achievement/challenges of E-Library at tertiary institution by TETFund, in the view of the researcher, constitutes a problem worthy of empirical investigation, which was guided by the following research objective.

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**4.** **Objective(s) of the Research**

The study seeks to determine the following general objective;

To examine the challenges that are associated with E – library in the Polytechnics and Colleges of Education in the North East of Nigeria, and identify solution to them (associated challenges).

**5.** **Review of Related Literature**

The term "e-library" is used synonymously with "digital library," "universal library", "future library," "virtual library," and "library without walls." It has been defined variously by different scholars and/or organizations, depending on their perception of the concept. Arms (2005), defines e-library as "managed collection of information, with association, services, where the information is stored in digital formats and accessible over a network." These two definitions recognize the need for the e-library to function over a network but the crucial part of the latter is that the information is managed. MacCall, Cleveland, and Gibson (1999), define e-library as collections of electronic knowledge resources developed and maintained in order to meet the totality of information needs for a given user population. Like the traditional library, the e-library is also targeted towards a particular group of users in term of its information dissemination.

Acting as a "quality guide," e-libraries often follow certain guidelines for the selection of content in order to maintain a consistent collection of data (Virtual Library, 2007). They follow procedures to select the materials in their collections, to organize and make them available to users. Waters (1998), states that, "digital libraries are organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to the Internet, distribute, preserve the integrity of, and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities. The Kentuckiana Digital library (2005), points out the academic significance of the e-library, recognizing the use of appropriate technology and defined it as an organized collection of selected digital resources created to support scholarship, research and teaching. It states further that the use of appropriate technological standards by e-libraries will facilitate permanent access to the digital resources.

At the most basic level and central to the definitions is a collection of digital resources selected according to certain criteria and made accessible for retrieval over computer networks.

5.1 Challenges

The infrastructure needed for the virtual library is not fully in place, networks already exist in some of the tertiary institutions but access to the internet is limited. Abdulsalami (2012), reported on the challenges in the acquisition of e-resources, mentioned poor and insufficient bandwidth for effective use by the library, the limited number of library staff skilled in e-resources and internet searches, and poor power supply and limited back-up available (very few libraries with good and dedicated standby generators). Web technology skills are needed to maintain web servers that host locally digitalized materials and other digital resources hosted remotely as well as maintaining proxy access to restricted resources. Ashcroft (2004), observed that Nigerian has an acute shortage of digital systems librarians; the virtual library cannot exist in this

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situation because web servers that host locally digitized contents and proxy servers that provide authentication and remote access to subscribed electronic resources need to be on for twenty-four hours a day.

Another challenge is the lack of purpose-built library buildings. Provision was not initially made for buildings with information technological devices. But the advent of information technology, renovation of existing library buildings will need to be done to accommodate new trends, facilities and service. The need for a virtual library system has therefore become the most urgent necessity in the polytechnic and colleges of education in the North East Nigeria.

Studies of libraries in general and Tertiary Institution libraries in particular have consistently reported inadequate levels of ICT literacy as one of the major problems facing libraries in Nigeria in the twenty-first century. ICT infrastructural development and poor funding have been identified as problems, followed by poor ICT skills among library staff (Adeyoyin, 2005; Igun, 2006; Baro and Zoukemefa, 2011). The present and future librarians should be able to exploit the use of information and communication technologies for modern library practice. These problems have really slowed down the activities of tertiary institution's library in utilizing global information and technological innovations for the services to their clientele.

With the introduction of digital libraries, the library profession is changing. Librarians and their staff must prepare themselves for the transformation from an era of scientific management to systems and structural management. It is a combination of functionally related computer systems where conventional practices will give way to innovative organizational managerial formats.

6.      **Methodology**

For the purpose of collecting data for this study, Qualitative research design was employed, which was considered to be the most appropriate for eliciting relevant data for the study. Qualitative research in business, management, marketing, health, education and the social sciences explores organizations, issues and phenomena by collecting and analyzing extensive unstructured information gathered through interviews, participant observation, document analysis and other methods (Hall, 2011). The population for the study comprised of Polytechnic and College Librarians, Cyber Librarians and Head of ICT Unit in the Library of the following states Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe.

Purposeful sampling was used to select sample out of the population of the study.  According to Akuezuilo and Agu (2002), purposeful sampling "is a non-probability sampling technique in which the researcher selects his sample to satisfy predetermined criteria. He simply hand – picks his sample because to his judgement, they are typical of what he wants and are representative sample".

The sample consists of the Polytechnic and College Librarians and Cyber Librarians as participants. The rationale behind the selection of Librarians was that, by official schedule they are in charge of the affairs of the Library. While the Cyber Librarians were directly concerned with management of the E-library/digital library as the case may be. They also provide means of access and reference to the electronic information.

| SN | State | Polytechnic Librarian | College Librarian | Cyber Librarian |
|---|---|---|---|---|
| 1 | Adamawa | Adamawa State Polytechnic | FCE Yola | Both |
| 2 | Bauchi | Fed. Polytechnic Bauchi | College of Education, Azare | Both |
| 3 | Borno | Ramat Polytechnic | Sir Kashim Coll of Education | Both |
| 4 | Gombe | - | FCE (T), Gombe | FCE (T) |
| 5 | Yobe | Mai Idris Alooma Polytechnic, Geidam | Federal College of Education (T) | Both |

**Table 1.1** distribution of participant and State (Field survey 2017)

The instruments that were used to elicit and gather data for the study comprised of a combination of interview and observation. The use of different data source (that is interview and observation) can reduce bias that can occur with using only one data source method, or procedure (Maxwell 2009). This method is referred to as triangulation.

Interview was conducted with the Librarians and Cyber Librarians guided by an interview schedule. The used of interview for this study was considered most appropriate for obtaining adequate and relevant information for the study. The researcher undertook personal visits to some of the Libraries in order to observe in practical terms, the networking, automation and/or digitization used in making the Library online.

The data collected was analyzed using thematic analysis; (focuses on identifiable themes and patterns of living and/or behavior). Generally, qualitative findings are generated through inductive processes — from detailed information to general themes (Bamberger et al. 2006).

Thematic analysis involves:

- Viewing the data several times as a whole (e.g., reading and re-reading the manuscripts).
- Identifying patterns and themes (e.g., finding common statements or ideas that appear repeatedly).
- Reorganizing the data (e.g., coding the data according to the themes identified).

In this regard therefore, the data collected was presented, interpreted and analyzed according to themes as contained in the interview schedule, and direct quotations (verbatim) of the participants was interpreted and analyzed.

## 7. Summary of the Findings of the Study

The participants of this research were interviewed using an interview schedule guide and their responses were recorded, interpreted and analyzed.

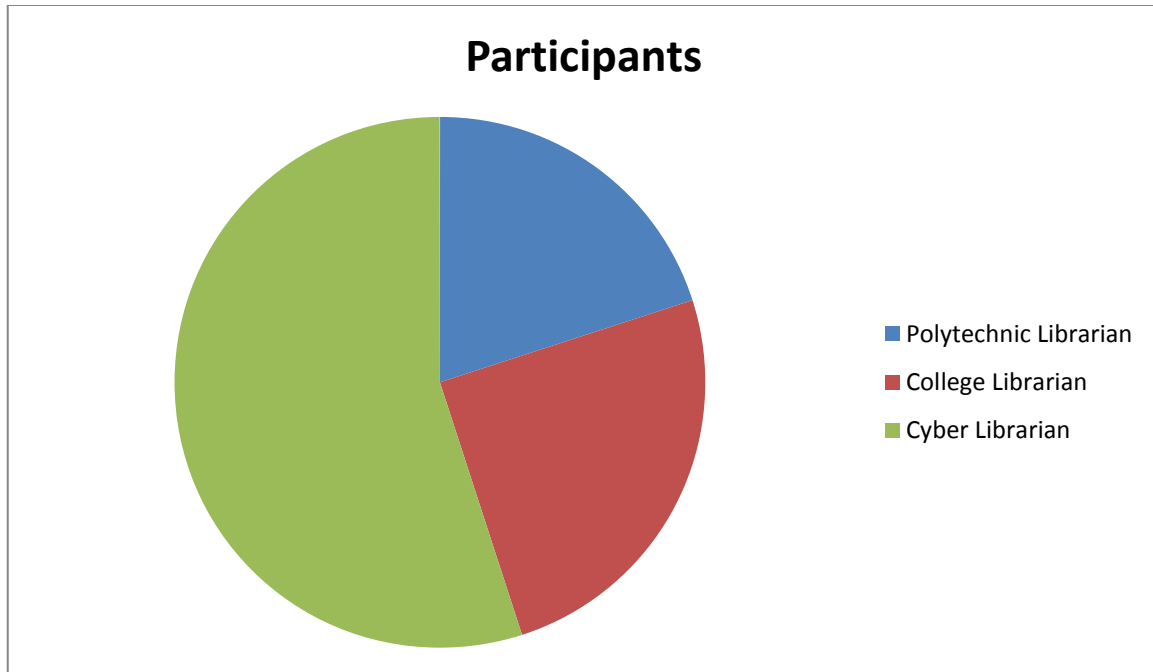| SN | Participants | Number |
|---|---|---|
| 1 | Polytechnic Librarian | 4 |
| 2 | College Librarian | 5 |
| 3 | Cyber Librarian | 9 |
| 4 | **Total** | **22** |

**Table 2.1:** Participants

Figure 1: A Pie-chart showing distribution of participants

The participants of the study comprise Polytechnic Librarians from Adamawa, Bauchi, Borno and Yobe. Whereas Gombe doesn't have established Polytechnic as at the conduct of the research, College librarians from the five state including Gombe and nine Cyber librarians.

Among all these libraries under study it was found that only three libraries namely; Adamawa State Polytechnic library, Federal Polytechnic Bauchi library and Mai Idris Alooma Polytechnic library have a functional e-library. Therefore, the study was restricted only to the said libraries which were digitized, it was also found that the three libraries were not fully digitized.

7.1 What are the challenges encountered

The participants shared their experiences and also indentified a number of challenges ranging from adoption, implementation and usage of digital library system. These challenges are more or less similar to other organizations and institutions as they were identified by the participants as follows:

7.2 Lack of adequate manpower

Most library professionals do not posses strong ICT knowledge and related skills. As a result they are unable to initiate technological changes in the library.

7.3 Lack of awareness

Users are not aware of digital libraries and those who are aware do not know how to use digital libraries. Perception of many library professionals towards technology and innovation acceptance is negative which hinders the adoption and usage of digital library system.

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7.4 Lack of infrastructural facilities

The availability of infrastructural facilities in the libraries of study areas was not satisfactory. Though very few among the libraries have initiated the digitization of their collection but availability of internet connection is lacking, while others suffers from fast internet connections and other required computer hardware.

7.5 Lack of government concentration

With the intervention of Tertiary Education Trust Fund Act No. 16 where the fund advises that beneficiaries should earmark part of their allocations for library intervention to e-library in order to keep up with the current trend. However, institutional initiative toward achieving this goal is still in infancy stage in the Northeast Polytechnics and Colleges of education libraries which have a negative impact on the adoption of e-library.

## 8. Suggestions

Considering the prevailing challenges of e-library, the following suggestions were made on the basis of existing literature, interviewed data and authors' point of view:

i.   Technical, physical and intellectual infrastructure must be developed to facilitate e-library in the polytechnic and colleges of education libraries in the North East of Nigeria.
ii.  Library authorities should arrange in-house training facilities for library staff and promote knowledge sharing culture to increase their skills and knowledge regarding e-library system and services.
iii. More user-friendly interface should be developed including user-familiar terminology, consistent interface style, and clear navigation flow.
iv.  Sophisticated search techniques should be introduced to facilitate electronic access to information content and services.
v.   The government should allocate sufficient fund to initiate e-library project and develop digital library software.

## 9. Conclusion

E-library is faced with numerous challenges which must be resolved for creation and adoption in the North East Polytechnic and Colleges of Education libraries. It was found that lack of manpower, ICT literacy among library staff, lack of constantan power supply among others are the major challenges in those libraries that are digitized.

The librarians of Polytechnics and Colleges of Education libraries in the North Eastern Nigeria have to be proactive in nature to meet up with the existing trend of the 21$^{st}$ century. That is to say the Information and Communication Technology age to provide up to date library services and meet up with the challenge that was pose by TETFund to became digital libraries.

## 10. Acknowledgement

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