ADOPTION AND ACCESS OF E-LIBRARY SERVICES IN UNIVERSITY LIBRARIES OF NORTH WEST ZONE OF NIGERIA

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Abstract:
This paper examined the adoption and access of E-library services in University library of North west zone of Nigeria. Survey research method was adopted to carry out the study using descriptive research methodology. The population used under this study comprised all the state federal, state and private universities in North–West Geo-political zone of Nigeria, comprises of seventeen (17) studied universities, the population considered to be subject of the study includes other professional and non-professional staff in the Nigerian university libraries on the position of university librarian circumstantially. The sample size depends on the nature of the research of the study. It is however proposed to have a sample of seventeen (17) universities, therefore the number of the universities is manageable, and therefore no sampling is required. The instruments used data collection is questionnaire. Stratified sampling technique was used in selecting the secondary population of the study. Data was also analyzed using descriptive analysis using frequency tables and percentages. Stratified sampling technique was used in selecting the secondary population of the study. The administration of the questionnaire was carried out by the co researchers and assisted by three (3) research assistants. The

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study found that, adoption and accessing of the electronic library services and resources in Nigerian university libraries of North-west Geo-political Zone are basically for the purpose of effective, reliable, and adequate library information dissemination. The study has also identified that some universities have for long adopted and established the electronic unit earlier than other university libraries in the North-west Geo-political Zone of Nigeria. Consequent to that, it has been identified that all the sampled university libraries have established the electronic unit for the purpose of information dissemination via electronic devices for rapid and speedy information services. The study has further revealed that majority of the electronic unit or managers of the electronic section are specialists in the area of library and information science. The study recommends that encouragement from the government will give enough room and opportunity to provide adequate transformation of information electronically in Nigerian University libraries of north-west geo-political zone. There is the need for the university libraries to concretely form a consortium for the formation of unified electronic services and electronic resource sharing e.g. Universities library consortium, Hinary, Lefel, etc. One of the greatest challenges or threats to the adoption and accessing or sustainability of using the electronic resources in Nigeria is the issue of power supply. Efforts should be made by the authority concern to provide alternative in case of power failure during the transformation services. The alternative probably might be the provision of solar power or standby generator in order to alleviate the challenge of inadequacy or none supply of electricity power supply. University libraries being an academic institution library should try by all means to promote their electronic resources and services for the university community members to be aware of their availability and existence.

**Keywords:** e-library, access, services and university libraries

### 1. Introduction

Application of computers and other electronic devices has been considered as the in-thing in teaching, learning, and dissemination of information in all aspects of life. To be specific, the trend received emphatic adoption in all institutions of higher learning globally. In this regard, the libraries, information scientists, and librarians must take the advantage of the information technology revolution to make their services globally visible. The adoption of technology is considered necessary to be part and parcel of taking the advantage of transformation in order to make teaching, research and information dissemination faster, accessible, convenient and easier.

Madu (2005) affirms that information generally has become very vital component of human endeavors, interaction and existence. The increasing availability, accessibility and management of information have begun to create sound relationship between individuals and groups due to information growth and expand social co-existence. The utilization of information creates competitiveness and productivity of education, socialization and industrial promotion by relevant application of information technology.
Based on a concession in most of the authoritative English dictionaries, information is regarded as fact, news, and knowledge (Madu, 2005).

Information explosion have been realized as one of the key factors of social, educational, recreational, cultural and development. The development has contributed to the immense integration of various social, political and economic pursuits both at national and international level in developed, developing and under developed countries.

The processes of management and planning of information is what entails to the ongoing evolution of the socio-cultural, socio-political environments. Olatokum (2009) states that information globally, and especially in the developed countries is believed to have a dramatic influence in the national transformation educationally, socially, politically, culturally and religiously. In this regard, therefore, the country can develop or transform positively with proper management and utilization of relevant information.

Information in Nigeria, therefore, is becoming more and more important in all sectors. It is only through the use of information that achievements, successes, failures, missions and visions, problems and challenges of every Nigerian sector will be publicly known and be well disseminated to the concerned individuals in the society. The dissemination of information will yield growth of adjustment, amendment and enhancement of industrial productivity and public sector services (Olatokum, 2009).

Information can be defined as news or intelligence communicated by word(s) or in writing. It can also be perceived as facts, data or knowledge that might be derived from reading. This was ascertained by Merriam-Webster’s collegiate dictionary “the communication or reception of knowledge or intelligence”.

Information resources are also perceived in terms of books, journals magazines, public or private sector documents of all kinds for official or personal use. The documents whether published for mass dissemination, utilization, circulation and preservation or unpublished for the sake of restriction, confidentiality or procession for subsequent consultation is also regarded as information resource (Womboh, 2002).

Womboh (2002) states that information contains meaningful symbols transferred between any two points in human communication. Modern librarians need to have strategic means of acquiring adequate and relevant information delivery services in our society for different developmental enhancement. More realistic to the above, is for the fact that, libraries are often the archive of local materials and are facts where patrons glean new learning about the past.

2. E-Library Services

In recent development, academic libraries adopt the enhanced electronic services digitally, electronically and virtually. The development so far faces a lot of challenges with regard to information seekers, information materials and the general management of the available resources (Manir, 2011). The concept digital, virtual, automation and electronic are synonymously used to define the function or operation.
Hultgren and Eriksson (2005) states that the services are meant for information dissemination, integration, mass customization, interactive communication and transaction support. Fundamentally, e-services are the services that involve the use of an information system (IS) as a performer or interface between the service provider and users.

Realizing the importance of services mentioned above rendered by university libraries and other academic libraries for the development of Nigerian education. Supervisory or regulatory agencies of Nigerian Higher Institutions such as Nigerian Universities Commission (NUC), National Board for technical Education (NBTE), and National Commission for Colleges of Education (NCCE) emphasized the need to support the initiatives of transformation of library services to electronic means in all Nigerian Higher Institutions of learning (Adaeze, 2007).

Aina (2013) declares that the development of Electronic Library, emphasized for the need to train and retrain the library managers (Librarians) from within and outside Nigeria to develop them in order to conform and face the existing challenges professionally.

3. Statement of Problems

Most library operations are gradually transforming from traditional system to new adopted electronic means of disseminating information. The adoption of this new system of library operation is no longer optional but rather mandatory.

The adaptation of new technology is supported by the regulatory bodies of the Nigerian universities via close supervision, funding and training to ensure the successful transformation, and utilization of modern library facilities. To some extent, some practical applications of the new trends of giving out information electronically need to be discharged under influential study for implementation by studying the possibilities of having effective implementation.

The main body or agency that is responsible for the development of Nigerian university education in general, consider it as an obligatory or essential integral part of university development to establish electronic library.

“In this era of information and communication technology (ICT), there is need for students at various higher learning institutions to be more receptive and adaptive to new technology”. The Nigerian university librarians, therefore, staff and students should be able to realize the significant aspect of the new technology.

There are several ways whereby institutional libraries can encourage students to adopt the new trends of library operation by using technological facilities as the easiest, accurate and less time-consuming services. The use of electronic library is the latest electronic means of disseminating information globally.

E-library, therefore, is considered as digital library, online library that always requires technological facilities to link the available resources of many libraries and information centers, so also their services for convenience and resource sharing. E-
Library in another perspective is a heterogeneous system in which the hard copy of information is transformed to magnetic tape and disc.

Several attempts have been made to investigate and pinpoint the relevance, importance and essentialities of the new technology. The antecedently transformation from the use of traditional information resources to the present advance use of other electronic means, are made for the basis of general awareness, adoption and access of newly trends of information service delivery.

For the sake of encouragement to the university staff, lecturers and the students on the utilization of university library electronically, there is need for the realization of the factors responsible for the sustenance of the good innovation. This entails that, the educational administrators should know the factors that influence and enhance the usage, access and adoption of e-libraries in Nigerian universities for the proper transformation of information services.

The researcher might observe the above realities of innovation, expectations and scenario on the level of awareness, access and adoption of the electronic library services and resources in Nigerian universities. Attempt to conduct this research, will vividly bring about the absolute awareness, challenges and solutions to the observed problems for university library development and further research.

3.1 Research Questions
The study addresses the identified problems by answering the following research questions:

1. To what extent have University Libraries in North-West Zone of Nigeria adopted the use of e-library system for information services?
2. What is the level of accessibility to e-library by the users in getting the information services in University Libraries of North-West Zone of Nigeria?
3. How do users access e-resources in University Libraries of North-West zone of Nigeria?

4. Methodology
The study therefore was set to cover only the university libraries in one of the six geopolitical zone in Nigeria i.e. North–West Zone. The University under this zone carried out the study on the adoption and access to their electronic libraries includes all the Federal, States and Private University libraries. The methodology adopted for this research was survey method using descriptive research method for collecting primary data. The population used under this study comprised all the state federal, state and private universities in North–west Geo-political zone of Nigeria, comprises of seventeen (17) studied universities, the population considered to be subject of the study includes other professional and non-professional staff in the Nigerian university libraries on the position of university librarian circumstantially. The sample size depends on the nature of the research of the study. It is however proposed to have a sample of seventeen (17)
universities; therefore, the number of the universities is manageable, and therefore no sampling is required. The instruments used data collection is questionnaire. Stratified sampling technique was used in selecting the secondary population of the study. Data was also analyzed using descriptive analysis using frequency tables and percentages. Stratified sampling technique was used in selecting the secondary population of the study. In a stratified sampling technique, the researcher first of all divides the population into subgroup or strata depending on the number and type of subgroups or stratum in the research. Then simple random sampling technique was used to select appropriate number of the objects from each subgroup or stratum for the study. Instruments for data collection are devices used to collect the data or measurement of variables. A questionnaire was designed to measure variables and was regarded as data collection instrument. The administration of the questionnaire was carried out by the co researchers and assisted by three (3) research assistants.

5. Nigerian Universities in North–west Zone

| States  | Federal University                        | State University                                      | Private                  |
|---------|------------------------------------------|-------------------------------------------------------|--------------------------|
| Jigawa  | Federal University Dutse, Jigawa State    | Sule Lamido University Kafin Hausa, Jigawa State       | -                        |
| Kaduna  | Ahmadu Bello University Zaria, Kaduna State | Kaduna State University                               |                          |
|         | Nigerian Defence Academy, Kaduna State   |                                                       |                          |
| Kano    | Bayero University Kano, Kano State        | Kano Univ. of Sci. & Tech Wudil, Kano State            | -                        |
|         | Nigeria Police Academy, Wudil, Kano State | Yusuf Maitama Sule University, Kano, Kano State        |                          |
| Katsina | Federal University Dutsin Ma, Katsina State | Umar Musa Yaradua University Katsina State             | Alkalam University, Katsina State |
| Kebbi   | Federal University Kebbi State            | Kebbi State Univ. of Sci,&Tech.                       | -                        |
| Sokoto  | Usman DanFodio University, Sokoto State   | Sokoto State University                                | -                        |
| Zamfara | Federal University Gusau, Zamfara State   |                                                        | -                        |

6. Data Analysis and Results

6.1 North-west University Libraries Based on Establishment of Electronic Unit
The major implication of this finding is that establishment of electronic units in the university libraries of the north-west zone might be due to realization of the efficiency,
reliability and accuracy of rendering the services electronically and the educational
transformation attributable to the zone. This is pictorially presented in figure 1 below

**Figure 1:** Bar Chart of Electronic Unit

![Bar Chart of Electronic Unit](chart.png)

From the results displayed in Table 2 below it could be seen that 82.4% of the
libraries in the North-west zone have electronic unit, while 17.6% of the university
libraries have no electronic unit.

**Table 2:** North-west University Libraries Based on Establishment of Electronic Unit

| Electronic Unit | Frequency | Percentage (%) |
|-----------------|-----------|----------------|
| Yes             | 14        | 82.4           |
| No              | 3         | 17.6           |
| Total           | 17        | 100.0          |

**6.2 Name Assigned to the Section by Different University Libraries of North-west Geo-Political Zone of Nigeria**

From the results displayed in Table 3 below it could be deduced that 58.8% of the North-west universities named their electronic unit as E-Library Section, 5.9% of them named their electronic unit as Automation Section/ Digital section, 29.4% named their electronic unit as Virtual Section. The major (58.8%) name e-library may be due to the fact that it could be easily identified by many library uses.
Table 3: Name Assigned to the Section by Different University Libraries of North-west Zone of Nigeria

| Name of Electronic Library | Frequency | Percent (%) |
|---------------------------|-----------|-------------|
| E-library section         | 10        | 58.8        |
| Automation section        | 1         | 5.9         |
| Virtual Section           | 5         | 29.4        |
| Digital Section           | 1         | 5.9         |
| **Total**                 | **17**    | **100.0**   |

6.3 Distribution of Establishment Period of North-West University Libraries

From the results displayed in Table 4 below it could be seen that about 65% of the electronic unit of the universities in the Northwest zone were established from the period of 5 to above 10 years while about 35% of the electronic units were established within a period of 5 to less than 1 year, this indicate that majority of the electronic units in the libraries were adopted in the north-west zone for almost a decade. This is pictorially presented in Figure 2 below:

![Distribution of Establishment Period of North-West University Libraries](image_url)

**Figure 2:** Distribution of Establishment Period of North-West University Libraries

Table 4: Distribution of Establishment period of North-West University Libraries

| Establishment Period | Frequency | Percent (%) |
|----------------------|-----------|-------------|
| 10 years Above       | 5         | 29.4        |
| 5-10 years           | 6         | 35.3        |
| 6-10 years           | 3         | 17.6        |
| 1-5 years            | 2         | 11.8        |
| less than a year     | 1         | 5.9         |
| **Total**            | **17**    | **100.0**   |
6.4 Distribution of North-West University Electronic Libraries Stage of their Transformation

The results from Table 5 below shows that only (29.4%) of the Northwest university libraries were at the full stage of electronic transformation while about (47.1%) of the university libraries were at the partial stage of electronic transformation, and (5.9%) at another specific stage and others or none transformed stage with (17.6%). This might be due to the fact that minority of the universities in the North-west zone of Nigeria was not fully developed and they are being faced with many infrastructural challenges.

| Stage of Electronic Transformation | Frequency | Percent (%) |
|-----------------------------------|-----------|-------------|
| Full                              | 5         | 29.4        |
| Partial                           | 8         | 47.1        |
| Specific                          | 1         | 5.9         |
| Others                            | 3         | 17.6        |
| **Total**                         | **17**    | **100.0**   |

6.5 Distribution of North-West University Libraries Based on Electronic Materials

From Table 6 below it could be seen that majority 58.8 % of the north-west geo-political zones have adopted the combine use of e-materials as the percentage of those that were solely having access to either e-book, e-journal and e-dissertation/thesis is far below those universities that have combine all the three showing some significant level of e-transformation among the north-west universities. This is pictorially presented in Figure 3 below.

![Figure 3: Distribution of North-West University Libraries Based on Electronic Materials](image-url)
Table 6: Distributions of North-West University Libraries Based on Types of Electronic Materials

| Type of E-material  | Frequency | Percent (%) |
|--------------------|-----------|-------------|
| E-book             | 3         | 17.6        |
| E-Journal          | 2         | 11.8        |
| E-newspapers       | 2         | 11.8        |
| All of the above   | 10        | 58.8        |
| **Total**          | **17**    | **100.0**   |

7. Summary of the Findings

This section summarizes the major findings as they relate to the objectives and major variables of the study in the following:

1. The study found that, adoption and accessing of the electronic library services and resources in Nigerian university libraries of North-west Geo-political Zone are basically for the purpose of effective, reliable, and adequate library information dissemination.

2. The study has also identified that some universities have for long adopted and established the electronic unit earlier than other university libraries in the North-west Geo-political Zone of Nigeria. Consequent to that, it has been identified that all the sampled university libraries have established the electronic unit for the purpose of information dissemination via electronic devices for rapid and speedy information services.

3. The study has further revealed that majority of the electronic unit or managers of the electronic section are specialists in the area of library and information science.

8. Conclusion

From the findings of the research all the established universities in the northwest zone in Nigeria have the awareness of the significance and importance of electronic services, and also from findings the situational report of the university libraries of electronic services need enhancement for better information delivery due to the fact that, the studied universities are facing challenges in the maintenance of electronic resources and provision of the electronic information services.

Arising from the findings of the study, it could be concluded that, the history and development of Nigerian university libraries was along with the development of Nigerian education and Nigerian universities. The importance of libraries was identified; hence the development of libraries is concurrent with the establishment of Nigerian universities.

The prime target of every library and especially the academic Libraries such as the university libraries is to provide effective, relevant, and adequate information. Universities are institution of higher learning that take charges of rigor and in depth
researches with the roles and essential services of university libraries generally and with particular reference to Nigerian universities of the North-west geo-political zone.

The plan to achieve the above objectives, necessitate for the adoption and accessing of electronic services and resources not only the north-west university libraries of north-west geo-political zone but throughout the world. The transformation is from the traditional means to the present modern means of using electronic media and resources.

Consequent to the above findings and interpretations, there is dynamism in the services, resources, financing, skills, and mode of acquisition and capacity building of the library personals. The transformation also cannot be free from challenges that mostly necessitate for the training and re-training in order to cope with the current development of information dissemination trends that has been terms and regarded as the adoption and accessing of electronic services and resources in Nigerian university libraries of north-west geo-political zone.

9. Recommendations

Based on the above findings of this study and the conclusion reached, the following recommendations are offered:

1. Realizing the significance of this transformation from manual (Traditional) to modern (electronic) means of information provision, universities must be supported by the government to boost the existing effort financially, advisably, or otherwise in addressing the challenges of their libraries. This encouragement from the government will give enough room and opportunity to provide adequate transformation of information electronically in Nigerian University libraries of north-west geo-political zone.

2. There is the need for the university libraries to concretely form a consortium for the formation of unified electronic services and electronic resource sharing e.g. Universities library consortium, Hinary, Lefel, etc.

3. One of the greatest challenges or threats to the adoption and accessing or sustainability of using the electronic resources in Nigeria is the issue of power supply. Efforts should be made by the authority concern to provide alternative in case of power failure during the transformation services. The alternative probably might be the provision of solar power or standby generator in order to alleviate the challenge of inadequacy or none supply of electricity power supply.

4. University libraries being an academic institution library should try by all means to promote their electronic resources and services for the university community members to be aware of their availability and existence. This because, most of the available electronic resources in the Nigerian university libraries are being underutilized. And some of the reasons behind it include the ineffective and constant supply of internet services and the technical knowhow of using the facilities in the university libraries. As a librarian there is the need for finding way
of keeping your library users aware of whatever you acquired, and how to utilize the resources maximally.

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