

*Full Length Research Paper*

# Problems and prospects of electronic resources usage in Nigerian academic libraries

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Accepted 4 April, 2012

**This work dealt with the problems and prospects of electronic information resources in Nigeria. It was obvious from the review that the use of e-resources is not problem-free in Nigeria. Amongst others, it was pointed out that acquisition and maintenance cost, availability of electronic information resources gadgets, spare parts and experts, erratic power supply, are major problems militating against the effective use and usability of e-resources. It was also seen that though there are numerous problems plaguing the use of e-resources in Nigeria yet there are also numerous positive prospects; with emphasis that the use of e-resources will increase immensely; possibly, e-resources are likely to send print-resource on parking or the barest minimal use. These positive prospects were as a result of the numerous advantages that e-resources have over the print.**

**Key words:** Academic library, e-resources, internet, information.

## INTRODUCTION

The use of information technology in Nigerian academic libraries has been profoundly affecting all aspects of information acquisition, storage, and transfer. Its magnificent development has dramatically changed the mode of library operations and information services. Hundreds of thousands of monographic materials, journals, learning resources, databases, etc. are now available in electronic formats, and these materials can now be accessed from the remote corner of any country, thereby increasing the use of information and literature and the efficiency of information services in Nigerian tertiary institution. Users are now more independent than before; they can access to these electronic formats from their home computers and search databases according to their information needs. Students, teachers, researchers, information professionals, and employees are the user categories in tertiary institutions. Their needs vary, their information or literature-seeking behaviour also varies, and they need to be cared accordingly. Requirement of an individual needs to be individually addressed in an efficient way. Information resources also need to be accessed by them depending on their requirements – be they print materials and web-based resources.

Electronic resources imply information materials that require the use of electronic devices such as personal computers (PCs), laptops, palm-tops, Notebook-laptops,

DVD-,VCD-,CD-players, projectors, phones, I-pods, I-phones, I-pads, internet-, WAN-, LAN- networks, etc for their usage. Some of the most used of these resources include flash-drives, memory cards, DVD-, VCD-, CD-ROMs, DVD-, VCD-, CD-RAMs, DVD-, VCD-, CD-R; DVD-, VCD-, CD-WR; DVD-, VCD-, CD+WR, etc.

Though there are numerous positive prospects to the use of these resources, yet there also are numerous problems militating against their sufficient use and usability.

## PROBLEMS MILITATING AGAINST THE USE OF ELECTRONIC INFORMATION RESOURCES IN NIGERIA

According to Ali (2005), a sizeable number of users (almost 60%) are facing numerous problems while using electronic information resources, such as lack of knowledge about the resources, lack of trained staff and inadequate terminals. He also identified four barriers to the effective provision of electronic resources in those libraries, namely: lack of strategic planning; lack of adequate or reliable funding; lack of use of Internet to provide information services to users and a lack of consistent training for users in new information and communications technology (ICT) services.

Further, Wills (1990) also concur to these problems when he identified insufficient number of terminals available for use despite high demand and inadequate electricity supply; lack of information retrieval skills for exploiting electronic resources, thus making the level of usage of resources by students very low. In his study, he found that 57% of students sampled could not use a computer, that the use of database was poor, due to lack of awareness, lack of access to computers, insufficient training and the high cost of provision. From the foregoing, problems militating against the use of electronic resources could be outlined thus:

### **Acquisition cost**

In the Nigerian context, the issue of acquisition of electronic information resources is not problem-free. This could be as a result of the poverty rate and economic meltdown, practically evident in every sector of the Nigerian economy; and the government's distress in financing projects in the society because these supposed monies have been carted away as a result of corruption that have eaten deep as a canker into the fabrics of the society. It is therefore obvious that most libraries in Nigeria are poor thus are not able to conveniently acquire electronic information resources for the use of their clients.

### **Maintenance cost**

Unlike in the manual system, using electronic information resources in the Nigerian society entails high cost of maintenance of the facilities that are required for their use. For instance, the computer operator/engineer may need to create file backups, regularly update antivirus database, guide against power surge by the use of uninterrupted power supply (UPS) and stabilisers, etc otherwise, computer systems could crash and files lost at any time. Thus, the guiding against these eventualities lay great strain and demands on both human and financial resources of the economy.

### **Availability of electronic information resources gadgets and their spare parts**

A times, the ready availability of the devices required for the use of electronic information resources and their spare parts pose to be more problematic than the very cost of their acquisition. In some cases, librarians and information experts may need to order these facilities and/or their spare parts from across Nigerian borders.

This is also a distressing factor in the use of electronic information resources in Nigeria.

### **Erratic power supply**

The devices that are required for the use of these resources require electricity to function, but in Nigeria electricity supply is epileptic and thus stands as a stumbling block to their by Nigerians. Even in some cases, when power generators are resorted to, the cost incurred is mind-blowing.

### **Lack of information retrieval skills for exploiting electronic resources**

When access to information or materials depends on access to equipment, there will be problems for all individuals who cannot get to, or use, the necessary equipment. Similarly, for individuals to benefit from information in e-resources, they need to be able to know how to access them and be able to access them. There are also issues about what volume of information and teaching materials individuals can make use of. Most people welcome advice about what staff think are the most important or most useful materials for them to consult. Clearly, the more information and other materials that can be made available to individuals in a variety of ways, in a variety of environments, with advice about what to prioritise, the more helpful and accessible are those resources for all. Effective information retrieval skills can be demonstrated by: the ability to evaluate various bibliographic search strategies; the ability to select and justify the appropriate search techniques in order to carry out independent research, and the ability to critically evaluate search results.

### **Availability of experts**

Electronic information resources gadgets are products of companies and individuals of high technologies so they require experts of high technologies as well for their manning and maintenance in the process of use. And since most of these high-tech companies are not found in Nigeria, in most cases many of the experts are not also readily available in Nigeria. This unavailability of experts hampers the rate of use of these resources.

### **The garbage in - garbage out phenomenon**

This is one major feature of electronic information

resources. It is obvious that computers could easily spread error output when error input is made, compared with the manual system. This could also be a phobia of many Nigerians inhibiting the effective use of these materials. One obstacle to the use of a library's resources, and in particular its electronic resources, is that they are not seen as being straightforward. In contrast to an Internet search engine, where a single keyword search will usually result in thousands of hits, no matter what the topic, in the library, students have to choose a particular database and be more selective in the search words they use. Moreover, database subjects often overlap, with differences in dates, journal and subjects covered, and whether the material is full-text or not. In addition, the library may have a print subscription to a certain title that is not full-text electronically, or the title may be accessible full-text through another database than the one originally searched. Therefore, not only do students have to find the relevant citations, but they also have to know how to locate the article after that. This means juggling many screens, many technologies, multi-tasking electronic jobs, and of course, knowing where to look for all this necessary information. Lastly, there is the additional confusion that more and more library databases use Web-based technologies. Because the interface is seamless there does not seem to be a visible, on the screen, difference between Web-based library resources and general Web-based resources. All of the afore-mentioned also assumes the student is proficient in the use of computers. It is quite clear that searching for information has become "inexorably linked to computer technology" (Jacobson, 1991).

## PROSPECTS OF ELECTRONIC INFORMATION RESOURCES USAGE IN NIGERIA

The use of electronic information resources in Nigeria is full of positive prospects. It is obvious from the way Nigerians get so attached to electronic resources gadgets such as GSM phones, computers, cyber cafés, TVs, VCD-, CD-, DVD-players, etc, that the use of electronic information resources will constantly or acceleratedly be on the increase. This view is supported by Bozimo (2010), when she opined that:

*The use of technology will grow to fill the available capacity. Library information systems have the potential to provide access to tremendous amount of bibliographic and full text information to a large number of users. Many of who will operate in the library or remote areas. The success associated with introducing a new information system often leads to increased use of the system, and it is often difficult to estimate the increase in use. Thus,*

*planning should be made to include expansion in the number of work stations and provision of high speed lines supporting external connectivity to end-users.*

From the afore-mentioned excerpt, it could be deduced that convenience, success and sense of accomplishment that accompanies e-resources make it impossibly indispensable. Also, commenting on the prospects of electronic resources, Dadzie (2005) writes that electronic resources are invaluable research tools that complement the print – based resources, and possibly with time could even outdate the print formats. The advantages of electronic resources, according to her include: access to information that might be restricted to the user due to geographical location or finances, access to more current information, and provision of extensive links to additional resources related contents. She agrees that these advantages carve a positive future for electronic resources.

Furthermore, the importance and wide-ranging scope of electronic resources for general communication, information retrieval and instructional delivery to support teaching and research activities in tertiary educational institutions is acknowledged worldwide. Literature also shows that a number of relevant studies have been carried out on the use of e-resources by lecturers, research scholars and students, folks worldwide. General user opinion towards the use of electronic resources, in particular CD-ROM, has been positive, with individuals enjoying using these sources and finding relatively few problems while using them (Ray and Day, 2010). This is clearly confirmed in the case of a survey undertaken at Oakland University by Schultz and Salomon (1990) into students' satisfaction with CD-ROMs. The study according to Ray and Day (2010) found out that 83% of students surveyed felt that using this source saved them time, and found it relatively easy to use. Two thirds of those surveyed stated that if the CD-ROM was busy, they would wait for it to become free rather than use the print tool.

Studies have also been carried out on the use of electronic resources by teachers, students and research scholars of universities and research organizations. Seventy-eight percent (78%) of the respondents feel that the use of electronic resources has created high independency value on their research work, and they do not lack current article from these electronic resources (Madhusudhan, 2008).

In the Nigerian context, Okello-Obura and Magara (2008) investigated electronic information access and utilization at various academic libraries. He found out that of the 250 targeted students used for the study, 190 responded, giving a response rate of 76%. The study revealed that users derived a lot of benefits from

electronic resources, gaining access to a wider range of information and improved academic performance as a result of access to quality information.

Jagboro (2003) had also emphasized the emerging reliance and attitude of users to electronic resources. In a study she conducted in some Nigerian Universities, it was found that 45.2% of respondents accessed electronic resources from cybercafés. Though this attitude, according to her is due to the proximity of cybercafés to user facilities.

In effect, all the studies reviewed so far are implemented on the assumption that uptake of electronic resources is highly desirable in that it leads to increased productivity of work, learning, teaching and research; thus electronic resources have come to stay and prosper.

In another perspective, young Nigerians are very spirited when it comes to information technology. They use their youthful strength in discovering phenomena that makes electronic resources indispensable in daily lives. Ray and Day (2010) supported this when they stated that:

Students entering higher education appear to have raised expectations about the capabilities of electronic resources. In some cases, they seem to think that there is a button they can press and it will write an essay for them.

This age is characterised by speed and accuracy; nobody wants to waste time anymore; people want whatever information at a push of a button. Thus, the advantages of electronic resources make them indispensable. With electronic resources, users could search more materials than when in print format.

Folks are now more sophisticated than their predecessors in using some of the basic functions of many electronic information systems. Both non-students and students use and like electronic resources, and most readily adopt them if the sources are perceived as convenient, relevant, and time-saving to their natural workflow. Experts in different subject disciplines (work fields) also have different usage patterns and preferences for electronic information resources.

Furthermore, another advantage that would make electronic resources usage increase in the future is its unlimited access both in time and space. Users could access more materials across the globe with the use of electronic resources in communication networks. This view is supported by Tiarniyu (2000) when he posited that:

*Browsing large number of core journals is convenient with the use of electronic resources, especially for subject experts and for current awareness searching. Personal subscriptions to print-journals continue to decrease, so*

*users rely more on electronic subscriptions subsidized by the library and on the Internet.*

Valentine (1993) posited that individuals look for the fastest way that would lead to satisfactory results when doing research, going for electronic information sources first.

Ray and Day (2010) insinuated that there appears to be an emerging over reliance upon electronic information resources at the expense of the more traditional forms of information. In view of this, there exists debate over “access rather than holdings”. This attitude amongst Nigerians may seem encouraging, considering the fact that electronic resources tend to bring about “access”, regardless of time and space. Bozimo (2010) therefore lent credence to this when she concurred that “contemporarily, emphasis is shifting to access to information materials rather than *ownership*”.

Jagboro (2003) is of the opinion that the prospects of e-resources could be outlined thus:

- 1) E-resources would be used unendingly in the classroom and lecture rooms of pre-primary, primary and secondary schools, and tertiary institutions respectively.
- 2) E-resources would likely be used to convert practically all manual system libraries to virtual libraries.
- 3) E-resources would be used by the Nigerian government to sensitise citizens of their programmes.
- 4) E-resources would be the backbone of communication.
- 4) E-resources would never replace print resources, though might put print resources to minimal use. This implies that paperless library would never be a reality but an illusion. This is supported by Spink (2003) when he concur that “even the e-journals, e-books, e-... are sometimes still printed for effective use”.
- 5) E-resources would proliferate the academic, business, government, and all sectors of the Nigerian community.
- 6) There is even likely to be over-reliance upon e-resources.

## Research questions

1) What are the problems militating against the use of electronic information resources in Nigerian academic libraries?

1) What are the prospects of electronic information resources usage in Nigerian academic libraries?

## METHODOLOGY

### Research design

In this study, a survey design is used and it is non- experimental.

**Table 1.** Academic libraries.

S/N	Academic libraries	Sample
1	University of Benin Library	20
2	University of Ibadan Library	20
3	University of Port-Harcourt	20
4	Delta State University Library	20
5	University of Abuja	20
Total		100

### Population of the study

The population of this study includes all academic libraries in Nigeria.

### Sample and sampling technique

The researcher randomly selected 20 subjects (both staff and users) each from five academic libraries for the study (Table 1).

### Research instrument

The research instrument titled "Problems and Prospects of Electronic Information usage in Nigerian Academic Libraries (PPEIUN)" was designed by the researcher to generate data on the basis of the research questions formulated for this study. The questionnaire was made up of two sections, A and B respectively. The demographic variables on educational level and experience; and items on the main variables which were in line with the research questions formulated to guide the study.

### Validity of the instrument

Two types of procedures were adopted by the researcher to establish the validity of the instrument. These include face and content validity.

### Reliability of the Instrument

To ascertain the reliability of the instrument, the test-retest method was applied. The instrument was to a separate group of subject, and after a week's time, the same instrument was re-administered. It was found out that the responses remained the same. This showed that the instrument is reliable.

### Administration of instrument

The research instrument was administered to respondents in person to the sampled academic libraries' patrons and staff by the researcher.

### Method of data analysis

Simple percentage method was used to analyse the data gathered

with the instrument.

## RESULTS

From Table 2, the respondents agreed that acquisition cost, maintenance cost, erratic power supply and lack of information retrieval skills for exploiting e-resources, are major problems militating against the use of e-resources in Nigerian academic libraries. This is shown in their "agree" responses of 65(65%), 73(73%), 95(95%) and 55(55%), respectively.

Also, the respondents do not see availability of electronic information resources gadgets and their spare parts, availability of experts and fear of spreading error input easily /speedily as problems militating against the use of e-resources in/by Nigerian academic libraries. This is evident in their "disagree" responses of 35(35%), 45(45%) and 23(23%), respectively.

From Table 3, the respondents agreed that E-resources would be used unendingly in lecture rooms; E-resources would likely be used to convert practically all manual academic libraries to virtual libraries; E-resources would never replace print resources, and that there is even likely to be over-reliance upon e-resources by Nigerian academic libraries. This is shown in the "agree" responses to the statements; 87(87%), 91(91%), 76(76%) and 56(56%), respectively.

## DISCUSSION

The study has been able to ascertain that acquisition cost, maintenance cost, erratic power supply, and lack of information retrieval skills for exploiting e-resources, are major problems militating against the use of e-resources in Nigerian academic libraries. These findings are supported by Ali (2005) and Wills (1990) when they concur that a sizeable number of users are facing numerous problems while using electronic information resources, such as lack of knowledge about the resources, lack of trained staff and inadequate terminals; lack of strategic planning, adequate or reliable funding; lack of use of Internet to provide information services to users and a lack of consistent training for users in new ICT services; lack of information retrieval skills for exploiting electronic resources, thus making the level of usage of resources by students very low.

It was also found out that availability of electronic information resources gadgets and their spare parts, availability of experts and fear of spreading error input easily and speedily, are not problems militating against the use of e-resources in or by Nigerian academic libraries. Rather, prospectively, e-resources would be used unendingly in lecture rooms; e-resources would be

**Table 2.** The following are problems militating against the use of electronic information resources in Nigerian academic libraries.

Option	Agree (%)	Disagree (%)	Total (%)
Acquisition cost	65	35	100
Maintenance cost	73	25	100
Availability of electronic information resources gadgets and their spare parts	35	65	100
Erratic power supply	95	5	100
Lack of information retrieval skills for exploiting electronic resources	55	45	100
Availability of experts	45	55	100
Fear of spreading error input easily/speedily	23	77	100

**Table 3.** The following are prospects of electronic information resources in Nigerian academic libraries.

Option	Agree (%)	Disagree (%)	Total (%)
E-resources would be used unendingly in lecture rooms	87	13	100
E-resources would likely be used to convert practically all manual academic libraries to virtual libraries	91	9	100
E-resources would never replace print resources	76	24	100
There is even likely to be over-reliance upon e-resources by Nigerian academic libraries.	56	44	100

used to convert practically all manual academic libraries to virtual libraries; e-resources would never replace print resources, and that there is even likely to be over-reliance upon e-resources by Nigerian academic libraries. This discovery is supported by Bozimo (2010) when she stated that "the use of electronic resources will increase to fill the available capacity".

## CONCLUSION AND RECOMMENDATIONS

E-resources usage in Nigeria is full of numerous bottlenecks. This notwithstanding, e-resources also have numerous positive prospects, not that there aren't any negative prospects but the positive outweighs the negative that the negative is so insignificant. It is therefore recommended that Nigerian governments and academic libraries at various levels should encourage and enhance the acquisition of skills required for the use of e-resources. Also, universities should instil in their students the concepts and importance of e-resources usage. These recommendations, if adopted, would put Nigeria in a significant position in the world globalisation trend in about three decades from now; this is because by then, every individual would have been an expert in handling e-resources for both individual and general advantage.

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