



Strengthening information provision in Nigerian university libraries through information communication technologies

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311

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Abstract

Purpose – To review the current state of information communication technologies (ICT) application for information provision in Nigerian university libraries and make suggestions to enable them take fuller advantage of ICT facilities to provide information more effectively to users.

Design/methodology/approach – Recent library and information science literature on university libraries and ICT application in Nigeria is reviewed to expose the state-of-the-art and hence the problems which beset the university libraries in Nigeria as regards ICT application.

Findings – Identified obstacles militating against effective application of ICT in university libraries to include inadequate funding, inadequate electricity supply, shortage of competent manpower for operation and maintenance of ICT facilities, lukewarm attitude of the Nigerian government towards the provision of ICT facilities and low level of computer literacy among Nigerians.

Research limitations/implications – Physical visits were not paid to the university libraries; conclusions drawn are based on experience and evidence from current librarianship literature on Nigeria.

Practical implications – A very useful source of information on how to ameliorate the problem of low level of ICT application for information provision in university libraries in Nigeria.

Originality/value – Provides very useful and practical suggestions to enable university libraries in Nigeria take advantage of ICT facilities to provide information more effectively to their users. These include massive infusion of funds into purchase of ICT facilities, provision of constant electricity supply, greater commitment of university library staff to computerization efforts in their libraries, training and retraining opportunities for librarians in computer literacy and involvement of libraries in cooperative acquisition of electronic information resources through consortia.

Keywords Communication technologies, University libraries, Nigeria, Internet, Information facilities

Paper type General review

Introduction

The university library is an important agent in the pursuit of academic excellence in the university system. Its goal is to support the objectives of the university which has to do with learning, teaching, research and community services. The extent to which the university is able to carry out its laudable objectives, portrays how the university library has been supportive to it in the provision of all the essential information resources. This puts the university library at the centre of academic excellence in the university system.

The university sets out to carry out its role in the university system by assembling a wide range of information resources in all formats both book and non-book. In the present times, these range of resources include the computer and its associated peripherals aimed at increased access to timely, accurate, relevant and current



information from both immediate and remote data bases. This has become necessary because of the current phenomenon of information explosion worldwide resulting from the astronomical rate at which information is being generated in this twenty-first century. For instance, according to Wieers (1994) at the beginning of the twentieth century, there were about 10,000 journal titles, whereas in the year 2000, it was estimated that there were one million journal titles (Aina, 2003). The information explosion has been further intensified by the advent of information technology especially the internet. Web publishing has now become a major route for transmitting knowledge (Aina, 2003).

Nigeria as a country does not exist in isolation from other countries of the world. It is therefore imperative that these developments in information transmission be imbibed to a large extent for her collective survival in this information driven twenty-first century. The universities in Nigeria, as the major suppliers of high-level manpower for national development, must therefore be very much involved in tapping current and most relevant information in all disciplines for the attainment of academic excellence through university libraries.

There are 47 university libraries in Nigeria today and most of them are unable to provide adequate and current information to their users. According to a survey conducted by Ademowo and Adekigbe (1999), cited by Omekwu (2001) only four universities out of 36 were connected to the internet. The situation has not improved much given the limited funding available to university libraries in Nigeria (Zakari, 2000; Idowu and Mabawonku, 1999; Aina, 2003). Yet users of university libraries in Nigeria are already very conscious of the need to provide information in the university libraries through the internet or on-line. According to Ubogu (2000) library users are expecting to find the resources they want in a digital form and accessible electronically and are beginning to demand a one-stop shopping in an integrated information environment. This need cannot be met in the traditional library environment that many are used to.

This demand by university library users therefore calls for more decisive strides by Nigerian universities towards equipping their libraries with the necessary information communication technology (ICT) facilities that would enable the university libraries to provide the services expected of electronic libraries of the present times. In the opinion of Ojedokun (2000), increases in the prices of publications, the cost of buildings, storage, preservation and inadequate funding are making it harder for traditional libraries in Nigeria to afford their previous levels of purchases. Many of them have therefore decided to review their subscription or purchase policies, including reduction in journal titles. The resultant effect of this is that the university libraries are no longer able to satisfy the demands of their users for current and relevant titles. The traditional university libraries cannot keep pace with the current trends in information explosion and the electronic libraries which depend on the computer and the internet. Information technology facilities in university libraries offer the opportunity for access to up-to-date research and knowledge globally (Bao 1998).

This paper will discuss ICT in university libraries, specifically constraints to the use of ICT in university libraries in Nigeria, and make suggestions for improving access to information in university libraries in Nigeria through such ICTs.

ICT and its role in university libraries

According to Onyekwelu (1999), the convergence of three technologies such as computer technology, telecommunication technology and broadcasting has yielded the internet as the greatest wonder of the century. It offers unlimited possibilities and capabilities in communication and dissemination of information in various forms (voice, graphics, data, etc.). These capabilities are prevalent in the present day university libraries as avenues for speedy processing and access to information in both remote and immediate databases to meet the information needs of their teeming users. The benefits of the fully computerized university library to their users are enormous. According to Oketunji (2000), they include:

- cooperation and the formation of library networks;
- easy integration of various activities within a library and between libraries in a network;
- elimination of some uninteresting and repetitive work in a library system;
- increasing the range of services offered;
- provision of marketing opportunity of its services;
- ultimately saving or even generating money; and
- increased efficiency and effectiveness.

The availability of full internet access in the university library facilitates on-line access to the world of information (Adeogun, 2003). Alasa and Kalechukwu (1999) also articulated the benefits of ICT in university libraries as:

- quick and convenient information exchange;
- access to experienced and expert individuals in many fields;
- access to regular updates on topics of interest;
- enhancement of teamwork across geographical distance;
- transfer of data between machines;
- promotion of a great platform to have fun and be entertained;
- facilities for sending and receiving e-mail;
- facilities for electronic search; and
- facilities for transacting electronic borrowing.

The current trend prevalent in the University of Jos library in Nigeria, as reported by Akintunde (2002), captures succinctly the role of the fully digitized or fully computerized university library in the pursuance of the goals of the university. The University of Jos library is one of the few cases of a fully computerized library in Nigeria today. The facilities provided by the university management for the university library are varied and up to date. They include 40 computers, 23 of which are networked (LAN and WAN). Some of the computers in the university library are used for administrative record keeping and communication, technical processing of library materials and readers' services. The university library has a computer laboratory, which attracts hundreds of visitors everyday who come to do literature searches, access both the internet and intranet and print documents. Generally, the networked computers in the laboratory have the capacity to do multiple tasks, which include

electronic mail (e-mail) services and Web browsing. Internet connectivity in the University of Jos is through a Very Small Aperture Terminal (VSAT). A web site has been created for the university library. The services offered by the University of Jos library are numerous and very far reaching. This is a demonstration of the fact that electronic libraries of the modern times are achievable in Nigeria given the provision of all necessary facilities and resources as is being done at the University of Jos.

Constraints to the use of ICT in university libraries in Nigeria

There are a number of obstacles militating against the use of ICT in universities in Nigeria. Although digital libraries are very important for speedy delivery of information, there is the great challenge of how to improve upon the information communication Infrastructure in Nigeria and Africa as a whole (Ojedokun, 2002). This is in the light of the suggestion by Afullo (2000) that the present-day Nigeria is among the lowest in the world in ICT infrastructure. Yet Alemie (1998) asserts that telecommunication infrastructure remains the backbone for the application of a wide range of communication and multi-media services such as digital libraries. It is therefore highly regrettable that Nigeria is unable to boast of being counted among the countries in the forefront of computer awareness. Obstacles identified by Alasa and Kalechukwu (1999) as militating against the full presence and utilization of ICT facilities in university libraries in Nigeria were:

- poor and inadequate telecommunication facilities;
- poor level of computer literacy, even within the academic community;
- poor level of computer facilities;
- poor level of awareness of internet facilities among policy makers, government officials and the ruling class in general; and
- minimum involvement of academic institutions in network building in Africa.

It is a sad indictment to say that these obstacles are still valid today, some 15 years later.

Other factors militating against the full operation of ICT in university libraries in Nigeria include; poor funding, erratic power supply, ignorance on the part of the government and many Nigerians about the vital role of information in national development and hence the absence of a national information policy for Nigeria, shortage of competent manpower for information technology operation and maintenance in Nigeria. Inadequate funding for information technology facilities in Nigeria was decried by Ochai (2002; Zakari (2000); Aina (2003). The lukewarm attitude of government which has also gone a long way to stall the provision of most of the essential facilities for the full computerisation of university libraries was also identified by Onyekwelu (1998); Adedoyin (2001).

Improving access to information in Nigerian university libraries through ICT

The internet has become so popular in Africa that its growth in the last five years has been tremendous. All the 54 countries and territories in Africa now have internet access. In like manner, the last three years have been wonderful as cybercafés with computers fully equipped with internet access now dot every corner of major cities in

Nigeria. These cybercafés are generally being besieged by secondary school and university students, thereby making internet part of the educational culture in Nigeria (Aina, 2003).

In the light of this development with internet access in Nigeria in recent times and the creation of intense interest in the use of computers by a larger number of Nigerians and hence library users, the erstwhile lukewarm attitude of Nigerians towards internet presence is being overcome. It is therefore necessary that university managements and their libraries make the necessary funds and facilities available for ICT facilities to be provided in their libraries for their users. This should include computers and their associated peripherals, constant power supply and adequate funding, among others. Librarians of university libraries should also avail themselves of the facilities of the cybercafés and computer training centers dotted all over the cities in Nigeria to update their knowledge of the use of the ICT so as to be able to render appropriate and adequate services to their users in the present electronic libraries.

For university libraries to effectively embrace ICT as a means of providing quick and easy access to information, the suggestions proffered by Nwalo (1998) are still worthy of note. They include:

- Overwhelming commitment by all for change from manual to digital electronic library.
- All problems that can militate against the technological change must be diagnosed.
- Changes desired and their implications must be properly understood by staff from top to bottom.
- There must be a harmonized and shared vision of how the expected technological changes and transformation will be managed.
- There should be a new shift or orientation that the electronic library system will usher in.
- Necessary policies, systems and structure for institutionalizing the new technological change should be put in place.
- Strategies for monitoring and adjusting in response to new questions that will be raised should be put in place.
- The new changes may require people learning about information communication technology and computers.

The demands of the new information age on library staff were also outlined by Ohuabunwa (2002) as cited by Omoniwa (2003) and suggest that it will not be business as usual. Power will rest largely on staff that possess multiple skills and employment of librarians will be based on skills in technology applications. Library staff will be expected to provide leadership in computer application, internet capabilities and CD-ROM technologies. Thus, librarians in the new digital age will be more knowledgeable, forward looking, creative, productive, more focused and more competitive. Access to electronically-held information in all databases will be more readily available to most university libraries through their involvement in cooperative organization of electronic information resources (Aina, 2003).

This can be made possible through their involvement in a consortium. According to Dai *et al.* (2000), a consortium is an alliance formed by libraries on a voluntary basis to

facilitate resource sharing in pursuit of common interests. This is necessary because of the high cost of infrastructure needed for access to electronic information in the fully computerized university libraries. A cooperative pooling of finances to achieve this collective acquisition of information communication technology facilities will enable financially weak university libraries to contribute to a general pool to ensure the utilization of jointly acquired ICT facilities and hence gain easy access for their users.

A consortium will ensure that there is electronic information network linking individual libraries in the consortium. This will provide uninterrupted access to information which otherwise might not have been available if the university libraries were to go it alone. The idea behind a consortium is to reduce the cost of acquisition of information materials and still allow users and individual university libraries to have access to a greater number of information materials that ordinarily one library may not own. In the opinion of Jalloh (1999), the global information explosion, escalating prices of journals, fiscal constraints and above all demand for faster supply of information through electronic means have forced librarians worldwide to share their resources through local, national and regional networks. Furthermore, consortia are imperative for African libraries for the following reasons:

- to prevent the emergence of information “have nots”;
- to use technology as a bridge from traditional printed heritage to the electronic world;
- to re-position libraries as the communication backbone of the information society in Africa;
- to increase the use of IT in order to improve all the levels of the education sector; and
- to improve the services and the status of libraries in Africa.

Conclusion

The university libraries of the twenty-first century are challenged to be digitized through the application of ICT facilities to their libraries. This is aimed at ensuring quick and easy access of the large numbers of library users to relevant accurate and current information from both remote and immediate databases to facilitate learning, teaching and research in the universities. A number of obstacles have been identified that militate against the application of ICT facilities in university libraries in Nigeria. These include inadequate funding, inadequate power supply, acute shortage of competent manpower for information technology operation and maintenance, lukewarm attitude of the Nigerian government towards the development of ICT facilities and hence the absence of an information policy for Nigeria, low level of computer literacy among Nigerians. Suggestions made towards improving access to information in university libraries in Nigeria through ICT include the massive injection of funds into purchase of ICT facilities for university libraries, the provision of constant power supply, a greater commitment of all university library staff to computerization efforts in libraries, and the provision of training and retraining opportunities for librarians in computer literacy. Finally, it is suggested that access to information in electronic libraries be facilitated through the involvement of university libraries in cooperative acquisition of electronic information resources by forming

themselves into a consortium. This will provide uninterrupted access to information which otherwise might not have been available if the university libraries were to go it alone. The implementation of the foregoing suggestions by the management of university libraries in Nigeria will go a long way to strengthen their easy access to information through the application of ICT.

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