

# **ELECTRONIC LEARNING AND THE CHALLENGES OF THE DIGITAL AGE FOR LIBRARY SERVICES IN NIGERIA**

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## **ABSTRACT**

*This study gives an insight into e-learning and library services as well as the challenges posed in this digital age. It highlights the need and benefit, for library services and advocates the establishment of e-library unit and proposes for information librarian to manage e-library resources. It is hoped that when the challenges of e-learning initiatives for library services are met, it will increase access, improve services, establish shearing partners with patrons, distance and widely dispersed e-learners and with other institutions in the world. In conclusion, there is need for the institutions to investigate alternative and independent means of access to information highway or internet for teaching learning and research purposes through such means as satellite communications, training and re-training of information librarians. In line with the above challenges, it is therefore recommended that all academic libraries in Nigeria must provide lecturers and student's access to the e-library data bases (internet), and to ensure that information from the database flow from Nigerian institutions to the global database for accessing through the internet.*

*Keywords: E-learning, library services, challenges, digal age*

## **INTRODUCTION**

Changes in the quality of higher education, information technology, and scholarly communication are provoking a radical change in the academic libraries. The librarians must pursue strategic thinking and action, fiscal agility, and creative approaches to the development of collections and services and to the expansion of markets. University library are advancing away from the traditional pattern, a model that is no longer viable. The combined impact of digital and network technologies, the globalization of education, scholarship, and increased competition for resources will produce a very different library in the academic sector over the next decade. Electronic library, library without walls, virtual library and digital library are the conflicting and overlapping concepts used to describe the integration of the new information technology in the library services.

In this study, electronic library is the use of digital technologies to acquire, store, preserve and provide access to information and material originally published in the digital form or digitized from existing print audio-visual or other forms (Uboegu, 2006). As a result, the need has arisen for a scientific approach to information and for elucidation of its most characteristic properties which has led to two principal changes in interpretation of the concept of information. First, it was broadened to include information exchange not only between man and man but also between machine and machine, as well as the exchange of signals in the animal and

plant worlds. The pace of change brought by new technologies has had a significant effect on the way people live, work, and play worldwide. New and emerging technologies challenge the traditional process of teaching and learning, and the way education is managed. Many higher education institutions have also exploited the potential of new information and communication technologies to develop new approaches to distance education, especially in business and management of computing. These new forms of globalization are beginning to replace more conventional types of academic exchange among the world's universities (Ogunsola, 2005). Electronic learning initiatives are transforming education by providing timely access to high quality resources and tools that support innovations in teaching and learning at all levels from undergraduate to postgraduate level (<http://www.ifla.org/copyright>).

Todd (2000) describes information technology as having created an information environment that is complete and fluid, connective and interactive, diverse and unpredictable, where the professional provision of information (the library) is no longer constrained by time, space and place. This is referred to as electronic library. Library then, being the nerve center of any citadel of learning for information processing, storage and dissemination is charged with the challenges posed in this age of ICT, its integration for global library services trends for on-line catalogue, indexes and data base including full text electronic resources through connection to both local, regional and global networks and by securing materials for numerous users. The emerging concepts, technology and strategies are to enhance the library information services delivery to numerous users, e-learners and widely distance patrons all over the world (David, 2008). By this assertion, it is clear that in an era of global information and knowledge sharing, the technology to create, manage and use information is of strategic importance to teaching and learning, most especially the library as an information provider. This study examines the concept of electronic learning, and the challenges posed for library services in the digital age.

Electronic Learning, according to Uboegu (2006), is the use of electronic applications and processes in both the communication and delivery of learning. Learning is increasingly being technology enabled via intranet, internet, PCs, CD or DVDs delivery. E-learning is just one aspect of learning and development and to the maximum benefit of this and other systems (Uboegu, 2006). Library as an organization, saddle with information processing must take time to suggest aiding and integrate the variety of systems in play. The term e-learning takes its root from the Digital Age in the 90s when various forms of "Es" were introduced to the internet. When we talk about e-learning today, we mean a site on the internet or intranet that is available to everybody, an illustrated encyclopedia in electronic format, or even a multimedia based presentation. In fact, all these ideas are put together to create a picture of what an e-learning is all about. E-learning is a kind of virtual or distance education to deliver content by electronic means through the use of the Internet, Intranet or CD-Rom, aimed at effective teaching learning process. In short, e-learning

is a new delivery system of old training programs through the use of the internet rather than CDs. It is comprehensive, fast, efficient and effective training solution that combines excellent information management with the best technology (Ihemenlandu, 2003). The attraction of on-line education according to Afolabi (2001) is the opportunity to impact more on student's lives; service a wider range of audience and to provide a new potentially lucrative revenue source. Prior to this means of knowledge impact, education was and is still being acquired through classrooms. That is, the traditional system of education system.

As the world is fast becoming a global village, the emergence of internet has brought about the term e-learning, which is the teaching and learning activities over the internet just like we have e-commerce, e-banking, e-government and e-politics. Thus entirely a new paradigm in distance education with the capability to connect millions of computers worldwide, internet indeed is a veritable means of reaching learners on a global level. It is based on this level that e-learning and e-library services can be said to be synonymous.

The marriage of computer and communication technology, which is referred to as information technology, has revolutionized teaching and learning system (Akinola and Iyokoh, 2005). Considering the multifaceted crises in the educational sector in Nigeria, the crises of inadequate infrastructures, lack of current reading materials, students over population, inadequate qualified teaching personnel, irregular school calendar, inadequate funding among others. The library as an information provider should be equipped and provide such opportunity where users can log in and access library materials anywhere in the world without being converged within the four walls of the library (virtual library concept) (Okebukola, 2002). In Nigeria today, several students are produced from the post primary schools year after year, without corresponding space for admission into higher institutions. This is a major reason for the need for e-learning. Basically e-learning can be synchronous or asynchronous. In fact, many institutions now offer different programmes in undergraduate and graduate levels relying almost exclusively on computer-based resources for instruction. E-learning provides collaborative learning environments by linking students with the instructors and co-learners in other geographical locations to journals, publications, text materials, reference materials and many others (*infor@trainingdirectorynigeria.com*).

The National Open University of Nigeria (NOUN) which was initiated and established in 1983, but did not begin operation until April 2001 as a springboard for open and distance learning in Nigeria, is a typical institution for e-learning exploration. The NOUN is designed to increase access of all Nigerians to formal and non-formal education in a manner convenient to their circumstances. It also aims to cater for the continuous educational development of professionals such as Teachers, Accountants, Bankers, Lawyers, Doctors, Engineers, Politicians and Self-employed.

## **NEED AND BENEFITS OF E-LEARNING**

E-learning is very useful for distance learning education in many ways. For instance, there is effective lecture delivery, high level of interactivity between teachers and the widely spread distance learning students (Michael, 2004). Also there are teachers, learners and instructional media interactivity and on-line communication between the teachers and the learners. Determined to advance higher distance education to unprecedented level in Africa. Stakeholders gathered recently for three days at Sunnyside campus, university of South Africa to share ideas and insights on how to develop a strong and viable open learning and distance education system for consortium and collaboration in programs, materials and other aspects (Daniel, 2008). Some other needs for e-learning services include:

- i The need for industries to be encouraged and be active agents of their own education.
- ii The need for distance learning for easy access and retrieving of information resources available for use.
- iii The need of a global platform where information and knowledge can be easily exchanged
- iv The need for international organizations to impact training and skills to their regional representatives.
- v For library organization, the need for a faster response to changing market demands and above all, the resources will never be out of loan and will be available at any time, any place, and anywhere.
- vi Access is provided to more complete sets of journals than, in many instances, now exists on many library shelves.
- vii Technical services cost of tracking the arrival of such journal issue, claiming, and periodical binding will be eliminated.
- viii Need for added library space may decline.
- ix Costs of retrieving and re-shelving materials will be reduced.

The main benefits to be derived from e-learning include the following:

- i There are lots of independence in learning how to learn.
- ii There is more control over student's initiatives and their learning.
- iii There is flexibility in terms of when to study, source and where learning should takes place.
- iv It increases patron's independent skills.
- v It provides learners with the materials they are interested in.
- vi It provides skill training for specific jobs.
- vii It is the best tool for adult education, and
- viii It provides for a greater organizational scope.

### ***E-LEARNING: CHALLENGES FOR LIBRARY SERVICES***

The first challenge is the demand for multi-channel learning opportunity. Instead of tinkering with the current educational practices which aim at improving the situation,

they reasoned, we should approach the current crises of schooling from a completely different perspective. The need to learn how to learn and to provide multi-channel learning opportunity through a variety of flexible delivery mechanisms should form the basis of this new perspective. Considering the multifaceted crises in the Nigerian education sector as observed above, e-library initiative provides such opportunity for users given the trends of library towards more open societies and global economics. Hawkrigde (2003) in a project conducted on people of electronic libraries covering seventeen higher Education Institutions in the USA found out that academic communities have accepted that electronic information sources have had impact on their work.

Sloane (1997) had earlier confirmed this by claiming that the world-wide web offers more useful up-to-date and relevant information (in many subject areas) for public use than what most university libraries can offer. We must respond to new challenges by promoting learning in all aspects of life, though all institutions of society, in effect, creating environments in which living is learning". Libraries and librarians have become even more valuable in the knowledge management process. They have become crucial partners in learning, national building and development. Keigberg and Lorring (2005) in the higher education sector library services are among those academic support services that promote the comprehensive development of the students. These services comprise an integral part of the educational process, helping to strengthen learning outcomes and contributing to student success.

Larsen (2003) observes that our ability to generate and collect digital information continues to grow faster than our means to organize, manage and effectively use it. However, the library is still expected to provide the following:

- i Provide connections to local, regional and global networks through a functional telephone and Internet Service Provider (ISP).
- ii Order books, journals, magazines from bookstores world wide and to read reports and reviews.
- iii Provide online catalogue, indexes and data bases including full text electronic resources.
- iv Provide materials for students, academics and staff through interlibrary loan and other resources sharing arrangements through purchase, donation, collaboration and subscription.
- v ICT infrastructure: State of the art hardware and software, and sufficient bandwidth and responsive network management at multiple levels, from the institutional level upwards.
- vi Provision of professional support to facilitate thorough and accurate use of all library resources.
- vii Access to worldwide library material and services to the community and widely dispersed learners among others.

Hawkridges (2003) affirms that academic libraries continually seek to identify their roles in contributing to institution outcomes and objectives in the areas of research,

teaching and learning. Priorities in most academic libraries include active participation in furthering the institutional objectives of producing students who are information literate and are prepared for life long learning. According to him, guidance on the role of information in the research process and training in the techniques of accessing information are essential parts of the foundation for a life of learning.

Another major challenge is the Intranet and Internet connectivity for library services. Idowu and Mabawonku (1999) describe connectivity simply as the global interconnection of computer networks. The network makes it possible for information stored in the major computers (host) connected to it, to be accessible by other users irrespective of the distances separating them. According to Ndor (2007), the internet has made a lot of impact on the development of education. For instance, it offers the users more opportunities to work collaboratively with others on the Internet without barrier to distance and also exposes the users to wider knowledge and information. This new electronic medium for communication has shifted a number of boundaries in terms of physicality as well as convention. It is possible to speak/send messages to anyone linked up to modem and computer regardless of status and without having any visual cues to their behaviour. Users can converge easily and in a less formal manner with renowned professors and can remain relatively anonymous.

Many academic libraries at the tertiary level of education operate the main library and branch library concepts. When the main and branch libraries are automated or computerized with the former source, as the headquarters of network, a local area network is said to have been established. This kind of network within one library can be referred to as intranet. It also applies to a library whose various departments collaborate or intranet with one another through the use of computer with the basic concept of providing a communications link. A computerized information system can facilitate this objective.

Another challenge is the development of e-library. The contributions of e-learning will be incomplete without the mention of the development of electronic library network. According to Omolayole (2002), electronic library is a system by which library users access information that resides solely in electronic format or computer network without respect to physical location of the information. Electronic library network has been put in place to facilitate inter-university communication in the area of exchange teaching programme, information generation, sharing and promotion of joint research work by lecturers in different universities through the use of internet or satellite (Omolayole, 2002). E-library, Digital library, library without walls made possible by ICT has become the in-thing that no library worth its salt can ignore, it is called virtual because it is a wide area network library where the user enjoys the euphoria of being in distance libraries and yet has not physically moved. Electronic library development, according to Delos (2001) could be said to have been started by the National Library of Medicine in Bethesda, United States, with its pioneering use of computer to control photo composition or computer typesetting in the production of index medicos in 1964. This was evolution note; e-libraries if

fully in operation should enable any citizen to access all human knowledge any time and anywhere, in a friendly, multi-modal, efficient, and effective way by overcoming barriers of distance, language and culture and by using multiple internet-connected devices.

The transition from analog information to digital is very pervasive, resulting in various forms of electronic resources- websites, electronic/digital books and journals, digital government archives', electronic sound, image and film collections, business and educational databases. Afolabi (2003) affirms also that Phases in the evolution from print or paper to electronics resources have drastically changed the way in which libraries function as information, including full text, can now be accessed from laboratories offices and homes twenty four hours a day. In the early 1990s a large number of libraries throughout the world became involved in digital library initiatives. Notable among them is the US Digital Library Initiative (DLI) sponsored by the National Science Foundation, the UK Electronic Libraries (ELB) program, the Library of Congress American Memory programme among others. The DLI ran in phases since 1994 until 2005. Uboegu (2006) affirms also that, whether we like it or not, print-on-paper will eventually give way more or less completely, to electronics.

Another consideration is information librarian who will manage information resources effectively and with ease: Information librarian is an embodiment of digital information professionals who ensure that e-libraries are used effectively and with ease. Electronic information system management refers to the overall competences, knowledge of know-how, skills and attitudes necessary to create, store, organize, retrieve and disseminate digital information in electronic libraries, information librarians with newly acquired skills can play a meaningful and leading role in networked environment. Training is another impediment. The training of staff is a necessary investment if an organization must be productive. Librarians already have professional training. Technology becomes obsolete so easily, it is therefore imperative that training and re-training be done as a routine in order for librarians to cope with innovation and advancement in ICT for e-library services initiative at this age. Other challenges are: (i) inadequate funding, (ii) inadequate power supply, (iii) inadequate ICT facilities, (iv) lack of users education, and (v) inadequate infrastructural facilities

### ***SOLUTION TO THE CHALLENGES***

All academic libraries in Nigeria must provide lecturers and student's access to the e-library data bases (internet), and to ensure that information from database flow from Nigerian institutions, to the global database for accessing through the internet.

- i The library management of academic institutions of learning should promote technological development; this will enable lecturers and students to subscribe to e-libraries as well as the improvement of personal computer (PC) networks and general electronic infrastructures.
- ii Library management should continue to mount pressure on organizational management to invest more in the latest advancement of ICT that will promote

library services. Additionally, there is need for the institutions to investigate alternative and independent means of access to information highway or internet for teaching learning and research purposes through such means as satellite communications.

- iii There is also the need for academic institutions to define clear policies and strategies in relation to information communication technology (ICT) for library services on the need to cater for large students and lecturers' population and computer literacy program among others.
- iv Information librarians who know how to organize information in useful way should create and maintain (1) a clear categorization of information sources (2) Provision of cross reference to information sources, and (3) a clear and constant navigation structure.
- v Academic librarians should embark on the creation of computer based information system that are based on their library collections and connected to internet.

## CONCLUSION AND RECOMMENDATIONS

Over the years, the application of technology to teaching and learning has taken different formats. Nowadays, the internet has gained more popularity among students, teachers, educational administrators, and other members of the society as a whole. Constantly evolving terminologies to describe various forms of education that is to say, e-learning, flexible learning, network learning, on-line learning, and virtual learning, distance learning, and so on continue to evolve. Affirmed also is the adoption of the new technology (ICT) which has opened up different options for educational pedagogy, methodology and learning paradigms with which librarians and library services must contend with, if they must remain relevant in the discharge of their duties.

It is therefore recommended that, since the library is the nerve center of any academic organization for information processing, storage, retrieval and dissemination, the librarians should wake up to life with the responsibilities of making information available in any format both print, non-print and electronical to the patrons, wider and dispersed learners irrespective of time, space and geographical location especially, at this digital age. Also, the library management of academic institutions of learning should promote technological development: so as to invest more in the latest advancement of ICT that will promote library services.

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