

# E-LIBRARY: A MASTER-KEY TO FUNCTIONAL EDUCATION IN ACADEMIC LIBRARIES

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## **Abstract**

*In this paper, effort is made to examine the place of digital libraries in the development of education in Nigeria. Academic libraries play very significant role of providing the necessary information to the teachers and students to achieve their teaching, learning and research needs in the easiest, fastest and most comprehensive way. This central place of the library in academics has resulted over the years the necessity for academic libraries to continue to evolve in academics for improvement in teaching and learning in schools. The importance of E-library as a master key or bonuses to the collection of a wide variety of materials in digital forms – books, journals, Access tools: online library catalogues, subject gateways and portal as brought easy and quick access to solve academics problems as per in getting information on a particular research, subject or topic. Digital libraries inputs to the development of education in the nation are mentioned while some of the e-library's impediments such as financial incapability and dearth of qualified competent Librarians, with attitudinal problems are highlighted as well. Recommendations and Conclusions are drawn.*

The need for educational development in Nigeria cannot be overemphasized. Digital library – a collection of documents in organized electronic form, available on the internet or on CD-ROM (Compact Disc, read-only-memory) remains a veritable instrument for engendering formidable transformation of the Nigerian decaying educational system. The traditional/conventional or physical library, although it provides a basis for the digital library but does not possess the required speed that could position Nigeria on a platform that could enable it to compete as expected with other nations of the world in the area of knowledge acquisition, preservation and dissemination. In order to appropriately tackle the challenges in sourcing and getting quick and relevant materials and information for teaching and learning in Nigeria, however the need to examine the laudable roles library digitization could play as a master key to promoting functional education in Nigeria is suggested.

Interestingly, the aim of all libraries is for the emancipation of mankind from the clutches of the evil mechanism of illiteracy and misinformation as it is observed that man naturally is information sick unless properly educated (schooled) in the art of information extraction and use. Without the library, most especially the electronic form, no widely and updated materials and information could be gotten in academic efforts amongst the academic environment in this technological era. In describing the role of modern libraries for modern users; libraries are more than a building that houses books and data. The library represents a window to a larger world, the place (without boundaries) where people have always come to discover big ideas and profound concepts that help in building one self and the nation in education and other areas. Hence it is a big platform to opening new ideals.

In the last couple of years, students and lecturers in Nigerian tertiary institutions have increasingly demanded and preferred access to electronic sources delivery and networked information from their respective libraries (Covi and Cragin, 2004 in Okiy, 2010). Internet access is one of the greatest technological advancements being experienced in this 21st century. It revolves around advancements in Information and Communication Technology (ICT) which has gone a long way to influence the mode of information gathering, storage, retrieval and dissemination in these times.

In this paper, effort is made to examine the place of digital libraries in the development of education in Nigeria. The first part of this work addressed on the conceptual underpinnings of digital libraries and educational development, the third section of this paper looks at the situation of Nigeria, with reference to inclination towards library digitization. In the next section, the relevance of digital library in educational development is examined. Thereafter, some basic obstacles confronting library digitization are identified and policy recommendations are made to tackle the problems. Education, being the major agent of national development and transformation cannot thrive and become functional in the midst of conventional or physical libraries. Nigerian institutions must therefore align themselves with the wave of e-teaching and learning as well as making efforts directed towards the establishment and sustenance of digital Libraries.

### **Library and the E-resources as master key to Learning**

Internet access is used for electronic mailing services, electronic on-line chats, group activities among others (Akintunde, 2006). It has resulted in increased access to timely, accurate, relevant and current information in most ICT-compliant libraries all over the world.

The library generally enables the individual to obtain spiritual, inspirational and recreational activity through reading, and therefore the opportunity of interacting with the society's wealth of accumulated knowledge (Omojuwa 1993). The library within any academic community, no doubt, is more than an extension of education but the

backbone and the master key to opening further learning strategies. Library services are needed to keep the skills that have been acquired through literacy classes alive by the provision of good literature. If education is to be functional, that is, having a greater share in the moulding and building of a happier individual and a better society, the providers of such education must go further in their roles as literacy facilitators to a more practical role of providing libraries for sustaining the newly acquired skills of learners. The use of digital library would make the functions of library easier, more efficient, faster and broader in scope, compared to the conventional library.

Educational development and Library are two inseparable concepts, both being fundamentally and synchronically related to and co-existent with each other. One cannot be separated from the other. None of them is an end in itself; rather both of them are a means to an ultimate end. One dies as soon as the other perishes. One survives as long as the other exists. This twin-natured concept emerged from the birth of human civilization to the posterity through a process of evolution in concord with the varied needs, changes and circumstances of various stages of human life. Library has no meaning if it cannot impart education that becomes functional, useful serviceable in time of need. A well-equipped digital library is an essential element for the intellectual, moral, and spiritual advancement and elevation of the people of a given society. Library digitization entails the adoption of technological innovations in the capturing, storage, organization and preservation of library resources. It is a process that ensures effective library and information service delivery. Library digitization is a process through which library materials are converted from the hard copies to electronic copies. Digitization is an integral part of the library activities. According to National Library of Australia, (2009), digitization is a process of creating digital surrogates (version) of analogue materials from the library's collection. Activity cycle for digitization includes: capturing, storage, management and long term preservation. It should be noted that these are the processes that had led to an institution called digital library, virtual library or e-library.

While library digitization is a process; digital library, virtual library or electronic library is an institution in which collections are in digital form and accessible by computers. The digital contents may be stored locally or accessed remotely via computer networks. A digital library, virtual library or e-library is a type of information retrieval system. Digital library is an organization, which might be virtual, that comprehensively collects, manages and preserves for the long term, rich digital content, and offers to its user communities specialized functionality on that content, of measurable quality and according to codified policies (Candela 2008).

The term digital libraries were first popularized by the National Science Foundation (NSF)/Defense Advanced Research Projects Agency (DARPA)/National Aeronautics and Space Administration (NASA) Digital Libraries Initiatives in 1994. Distinction is often made between content that was created in a digital format (– born-digital), and information that has been converted from a physical medium by

digitization. It should be noted that many of the libraries in Nigeria are not wholly digital libraries, but are hybrid libraries. Hybrid libraries are libraries that have both physical collections and digital collections (Okiy, 2010).

Over the decades libraries have been known as information and knowledge institutions. They are known for provision of comfortable and conducive spaces, accommodation for information, education and research to wide range of users. However, efforts are recently geared towards redesigning and re-engineering libraries and their services in order to achieve a wider range of competitive goals needed in knowledge driven economy; driven by technological innovations (Ayanbode, 2011). According to British Library of Congress (2008), more recently, the advent of the internet and the ability to digitize large quantities of text and images and make them available over the web had transformed ways Libraries works. In this digital age, when access to information and knowledge is on high demand in the right package, libraries as facilitators have to enhance a paradigm shift in their services. Library services ought to be an integral part of local delivery, synthesized with services for all stakeholders of different age groups (adults and young people) and supporting knowledge management for personal, family, institutions, organizations, communities and national development. The concept library computerization as a process originated quite some decades ago in the more technologically advanced countries of the world such as the United States of America, Canada, Great Britain (Akintunde, 2002). It is observed that the trend has gradually transcended to other states of the world, Library digitalization is the process of adequately utilizing computer hardware cum software and its varying facilities such as networking cables, software packages, and scanners aid pointers in accomplishing library functions which were originally performed manually by the librarians.

With the invention of Information and Communication Technology, libraries now use various types of technologies to aid the services they render. Everyday new technological advances affect the way information is handled in libraries and information centers. The impacts of new technologies are felt by libraries in every aspect. Computing technology, communication technology and mass storage technology are some of the areas of continuous development that reshape the way that libraries access, retrieve, store, manipulate and disseminate information to users.

### **The Place of E-library in academic communities**

Academic libraries could generally be likened to those libraries that are mainly found in tertiary institutions, they are established to support learning, teaching and research processes. These libraries have been affected by changes in information and communication technology over the last few decades. The rate of changes is still accelerating in this area. The introduction of various information technology (ICT) trends has led to reorganization, change in work patterns, and demand for new skills, job retraining and reclassification positions. Technological advancement of the past twenty five years, such as the electronic database, online services, CD-ROMs and

introduction of internet has radically transformed access to information. Rana (2009) opined that ICT holds the key to the success of modernizing information services. Applications of ICT are numerous but mainly it is used in converting the existing paper-print records in the entire process of storage, retrieval and dissemination.

ICT has impacted on every sphere of academic library activity especially in the form of the library collection development strategies, library building and consortia. ICT presents an opportunity to provide value added information services and access to a wide variety of digital based information resources to their clients.

Furthermore, academic libraries are also using modern ICTs to automate their core functions, implement efficient and effective library cooperation and resource sharing networks, implement management information systems, develop institutional repositories of digital local contents, and digital libraries: and initiate ICT based capacity building programmes for library users.

Information and Communication Technology (ICT) has brought unprecedented changes and transformation to academic library and information services, conventional LIS such as OPAC, user services, reference services, bibliographic services, current awareness services, Document delivery, interlibrary loan,

Audio visual services and customer relations can be provided more efficiently and effectively using ICT, as they offer convenient time, place, cost effectiveness, faster and most-up-to-date dissemination and end users involvement in the library and information services process. The impact of ICT characterized on information services by changes in format, contents and method of production and delivery of information products. Emergence of internet as the largest repository of information and knowledge, changed the role of library and information science professionals from intermediary to facilitator, new tools for dissemination of information and shift from physical to virtual services environment and extinction of some conventional information services and emergence of new and innovational web based.

According to Iromatu (1996) Libraries today have shifted from conventional libraries where books and other printed texts are consulted and borrowed. In line with this, Kasperek (2003) opined that computer technologies are becoming part of any library jobs especially at this 21st century when the role of this technology in information services expands at a fast rate. Furthermore, the presence of Internet in libraries is accessible only with the aid of information technology and communication. Many libraries have developed sites to organise and publicise internal and external links to information. It is of note that computerization has enabled libraries all over the world to develop complex and simple globally accessible pages listing hours, locations and resources available while others have developed web layouts using a wide variety of languages.

### **Digital Libraries and Educational Development**

Seven categories of stakeholders of library digitization have been identified, they include: Information Professionals, Customers, Parent, Institution or Organization, Collaborator/Initiator Technology, Producer, Government, Library Schools. Digital resources range from archival documents to historical images to primary source materials from scientific field research. These collections may include specific learning activities or be used as resources for teachers to use. For online resources to be useful, reliable networks, universal access, and a sound IT infrastructure are also needed. Rudatebwa and Stockman (2007) observed that online resources demand electricity, PCs, Internet connectivity, and a network.

Association of Research Libraries (1995) enumerated the importance of online resources thus:

- The e-resources will never be out on loan and will be available at anytime, anyplace, and anywhere.
- Access is provided to more complete set of journals than, in many instances, now exist on library shelves.
- The cost of tracking the arrival of each journal issue, claiming, and periodical binding will be eliminated.
- The need for added library space may decline.
- Cost of retrieving and re-shelving materials will be reduced.

### **Useful Online Services in E-libraries: A master key bonuses**

Online services in e-libraries have evolved since computers were first used in education. Lang, in Ubogu (2006) identified the following as core services in e-libraries:

- i. The collection: a wide variety of materials in digital forms – books, journals, manuscripts, reference works, theses and dissertations, government documents, maps video, images and pictorial materials, music scores.
- ii. The provision of information about the library's services and collection to remote users.
- iii. Access tools: online library catalogues, subject gateways, portals.
- iv. Services: reference services, online tutorials, on demand publishing, electronic reserve-short loan and course packs, electronic course pack, lecture notes.
- v. Networking and imaging technologies to support and enhance all aspects of library basic operational activities –Z39.50, repository software –Dspace, e-print, etc. Open Archival Initiative (OAI).
- vi. Networking and imaging technologies to facilitate closer co-operation with other bodies.
- vii. Expertise within the library for the application of new technologies to library activities and bibliographical research of all kinds.

Any Technological breakthrough of a nation depends on the level of education and orientation of the citizenry. The rewards occurring from education therefore include knowledge, greater employment opportunities, higher income and better future prospects. Improvement of one's environment depends on the knowledge of that environment which is a function of education enabled greatly and with more ease and speed through digital libraries.

Digital library system has supporting roles in education especially in the area of research. In developed countries, the Internet is the working tool of researchers. They use it to cross-pollinate ideas globally as it happens in academic communities in Nigeria nowadays.

Connectivity to the Internet and proper tapping of the facilities provided by it will enhance the educational development of the nation. Educational materials and programmes from the developed countries can be easily obtained from the Internet and adopted by the user. Besides, it provides a means of up-dating one's knowledge on any discipline on a daily basis.

Interestingly, computer application and use in the libraries all over in Nigeria have proved to be a magnanimous contribution to the over-all educational enhancement of all humans irrespective of social, economic, religious cum racial affiliations. This is a truism as library digitalization has led to the:

- a) Increase in the patronage and use of information resources at various information centers especially the library, vis-à-vis the growth in personnel information quotient of persons in the world. This is so as the provision and application of computers and its other peripherals in the library have transformed the library into digital studios where information easily could be manipulated and acquired. In addition this novel trend of library computerization attracts patrons to the library for various purposes, some for sightseeing, recreational and research purposes. It is observed that the rate of library patronages, especially in universities universally, have increased drastically, as in case with Nigeria, where people hardly use the library in early 1990s. The situation has changed as librarians and library management now employ means to curtail the overpopulation of their libraries especially in academic) libraries where clientele would want to use, touch or have the feeling of being around a computerized digital library.
- b) Increase in moral and prestige of library staffs/personnel, where users would want to be identified with staff and the pretty computerized library. It was observed that to easily get information in this era, the library has to be technologically improved, hence the gradual change from manual to computerized ways of performing all libraries functions and services. Thus the presence of these equipment in libraries attract persons to the librarians who the patrons now see as technologist or experts in manipulating these equipment and at same time above the library staff. Naturally too, the egoistic attributes of the librarian have swelled as they now view themselves as information scientists/managers rather than book keepers.

c) Faster and easier ways of getting library functions, services and activities are done. Book selection and acquisition; bibliographic searching and reference services; interlibrary loans and cooperation are some of the tasks of libraries that were before now done with human efforts and much time. These recent trends of library computerizations have made these tasks much easier

Also library computerization when properly applied has the tendency of breaching internationally acclaimed physical boundaries. This is truism as with the use of the international network system libraries digitization can participate in resource sharing activities amongst themselves; this will lessen the amount of funds spent in acquiring physical information resources.

d) Creation of job opportunities within the library. This is necessitated by the presence of computers and their accessories. The library has transcended to the height of an organization, in less than a decade, from the focal point of just a building where books are kept. At present there are novel men job categories in libraries, especially the academic libraries such as web developers, computer instructors, maintenance officers, ICTs managers/officers and so on.

e) Computerization of libraries has provided libraries with cheaper means of purchasing information resources for their libraries. This is so as other methods where the libraries have to apply the use of manual means in selecting and acquiring its resources which is more costly and involves more human efforts. Thus libraries now acquire information resources through the World Wide Web and Internet and this has made it more affordable for libraries to procure more current information resources such as journals, which are very costly when procured in physical format.

### **Obstacles hindering proper administration of digital library**

There exist some impediments towards proper library digitalization. These include:

#### **i. Financial incapability:**

Often it has been noted that digital library management and librarians are willing and ready to make changes from the traditional method of library to novel trends, there is the negating factor of scarcity of funds.

This factor, over time has been viewed as a resultant posture of library management lukewarm approach to library development. Hence management exhibits their tight fist nature towards funds release for the procurement of novel library technologies and tools.

#### **ii. Dearth of Qualified Competent Librarians:**

Libraries especially in developing countries have personnel who are not librarians by qualification.

Hence these persons who function as library personnel do not have the capacity of functioning properly in a library environment thus leading to the under development of the library in function and services rendered.

Digital libraries require manpower skillful in ICT.

**iii. Lack of Technical Know-How/Awareness:**

Computer literacy in Nigeria is very low. The use of Internet facilities depends on one's technical know-how on the computer. Presently, in the industrialized nations, computer is a household name everywhere while in Nigeria, not all educated Nigerians are computer literate. Most computer literates even have their knowledge restricted to the use of the computer as a word processor. This means that Internet literacy is almost not in existence and the percentage of Internet literates is virtually below average.

**iv. Poverty Level of the Citizenry:**

Poverty level in Nigeria is high. Connectivity of individuals to have access to Internet is very expensive for the average Nigerian. Other impediments include: Inadequate library rules and ethics, autocratic/dictatorial stance of library/institution management. Once these hindrances are tackled, librarians and libraries all over the globe will definitely take a deep breath of satisfaction as a result of the comfortable atmosphere created by library digitalization.

**Conclusion**

Academic libraries play very significant role of providing the necessary information to the teachers and students to achieve their teaching, learning and research needs in the easiest, fastest and most comprehensive way. This central place of the library in academics has resulted over the years in the necessity for academic libraries to continue to evolve and move with the times so that they can deliver on the requirements of academic libraries in meeting the academic needs of their clientele in schools. This need has resulted over the years in the libraries in Nigeria displaying different stages of development in the application of Information and Communication Technologies (ICT), to library services.

The current trend in many libraries worldwide is the deployment of ICT facilities in rendering services of various kinds to their patrons by providing speedy and up-date information for their use. Glaringly, the modus-operandi of all libraries is for the emancipation of mankind from the clutches of the evil mechanism of illiteracy and misinformation. Man generally is information sick unless properly educated in the art of information extraction and use. The digitization of libraries remains an option that could bring about the development of education in Nigeria and other parts of the world.

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