

The Digitalized Libraries System: Challenges and Prospects in Nigeria's Libraries' Environment

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Abstract.

The concept of digitalization is one of the fastest singular means in the development of library service in any nation like Nigeria. Digitalization has changed the way of service provision to a new dimension in library world. The most effective way to achieve this is to create an electronic resources and services in digital or virtual libraries and distribute information using global telecommunication network in a way convenient to end users. The paper therefore, looks at the concept of digitalization, skills for the adoption of digitalized library system in Nigeria, challenges to librarians in utilizing digital resources in library environment, and implementing the use of Information and Communication Technology (I C T) in Nigerian libraries scene. In conclusion, the paper looked at the prospects of the digital library in Nigeria.

Keywords: Librarians, Resources, Skills, I C T, Virtual reality, Patrons

Introduction

The concept of digitalization is essential for effective service delivery in Libraries and other information centre in Nigeria. Digitalization according to Gbaje, (2007) is the process of converting non digital born documents to digital formats. Iwhiwhu and Eyekpegba, (2007) defined digitalization as the utilization of information communication and technology resources like internets, computers, fax machine, telephone, OPAC and e-mail e t c, as well as professionals that are well vast in the usage of I C T to carry out the

e-library services with the aim of providing efficient services to the numerous patrons across the globe through the World Wide Web (WWW). This new form of information representation makes it possible to produce, store, and distribute information on a qualitative new level. Hussain, (2009) opined that digital library focuses on the provision of services linked with digital content where the existing library services have significant components. He went on to say that digital library comprised collections, services and infrastructure that aid learning and research. In a digital scene, little or no movement of persons would be required before information can be used at any time of the users choice. Nkanu & Okon, 2010 defined digital libraries as the one that stored information electronically and made it available to users through electronic means and networks that have no physical location, but have an existence in virtual reality. Fabunmi, 2009 observed these resources as a child of necessity through the use of technologies in accessing the information in an online world. Through digital library system, the users and providers of the service derived maximum benefit from the usage of these resources which are now common in the world. Irechukwu, (2007) citing Tennant, (1990) conceptualized digitalization in three perspectives - electronic library, digital library, and virtual library. E-library can be seen as provision of library services through electronic means while digital library can be seen as a resource unit that has digital materials and services. Virtual library can be described as a separate library organized in a virtual space through the usage of computers and its accessories via electronic means. Virtual library in line with the view of Fabunmi (2009) is a resources unit that provides enhanced access to national and international information for quality education and research towards national and international development. In a digital library, services are made available in electronic forms, through internet so that the users can have access to information resources through the World Wide Web (WWW). Fabunmi, Paris & Fabunmi, (2006) linking the library digitalization to the routine service of the professionals in library observed that most of the library professionals are involved in providing services to their users using digitalized library service. The view of Fabunmi above was buttressed by Eke, (2011) when she observed that digitalization in the library make materials available in electronic format citing Tsebe, (2005) that states that digitalization refers to conversion of non –

digitalization to digital format that is appropriate to users' needs. Emphasizing the importance of digitalization to library services Akintunde (2006) asked an important question that showed the need for digitalization in library professions. "Can we continue to render services in the traditional pattern that we've always done and still be current? Doing things in the 'normal' way, can we as librarian last in the new information and communication technology era" He went on to say that a library that has come into limelight in the world especially at this age of information explosion is the one that has adopted the new method of services delivery of digitalization in services delivery. While Omekwu (2003) as cited by Ugwu & Ekere (2010) offers a clue on survival strategies that the university library should embark upon in order to remain relevant in this age of digitalization where information has become an essential commodity.

Skills for the Adoption of Digitalized Library System

Librarianship like other professions in the information industries has the users as major consideration in the provision of services. However, there are basic skills that the librarians and other supporting staff must possess. Musoke, (2007) observed that most universities, libraries emphasized user-centered approach in their service provisions. Therefore, for them to provide efficient services to the users, Musoke, (2007) and Achonna, (2008) observed that there is need to exhibit the followings skills which are very basic for librarian in this age of information explosion.

- Communication skills: for a librarian to promote his/her services to users in the usage of digital resources, there is the need for effective verbal and written communication between him as a person and the intending users of the resources.
- Training skills: This is essential for the librarian as a resource person and consultant in the various libraries so that he/she can train users in application of new technologies to meet their information needs. Fabunmi (2009) stated that the training of librarians is important in new technologies, scanning verification and other aspects for effective digitalized library services.
- Due to increasing amount of information available in digital resources, Choi and Rasmussen (2006) assert that there is the need for librarians to acquire the needed skills to meet the

present needs of its numerous users. Jones, (2001) as cited by Eke, (2011) pointed out that the skills needed for digital projects, if absent can cause a serious problem.

- Knowledge of the structure of the database and instruction which must be input into the computer by the users is very essential for librarians to know who will in turn guide users on how to go about the usage of the resources.
- The basic maintenance culture skills should be acquired by the librarians in order to provide first aid minor repairs to resources for consistent usage in case of breakdown in usage. Eke, (2011) observed that the latest technology and technical expert should be employed to guide against any security risk and other mishaps that have been witnessed in digitalized project.

Challenges to Librarians in Utilizing Digital Resources in Nigerian Academic Environment

Information and communication technology and its facilities have helped the library at various levels of human endeavor to meet the diverse needs of users. Almost all area of library services has been affected by the application of these resources. However, as good as these resources are, there are inhibiting factors to their usages either by the librarians or students who saw the indispensability of the resources to their academic endeavor as students and effective services provision to staff of the institutions. Moreover, most author where I C Ts, Virtual library, digital library have been used at one time or the other in Nigeria have identified some constraints with its usage. Nok, (2006) looking at the Ahmadu Bello University Zaria, Aderonke, Otunla, Akanmu-Adeyemo (2011) focusing on Library automation in Bowen University Iwo in Osun state of Nigeria while Akintunde, (2006) did a comprehensive research on some libraries in Nigeria, Europe and United States of America and found out that the same constraints exist in some of the libraries in Nigeria. Other constraints he identified from other authors focused on library management, library staff mindset, as a barrier to effective digitalized library services. Apart from the librarians experiencing some challenges in utilizing digitalized resources, the above authors also identified various constraints on the way of users such as power outage, lack of skills by library personnel, obsolete equipment, price for usage of I C Ts facilities, interconnectivity problems e.t.c. Doing a comparative study on two

academic institutions namely Federal University of Technology, Owerri (F U T O) and Niger Delta University, (N. D.U) library, Oyadonghan and Eke, (2011) found out that epileptic power supply and system failure are some visible constraints in F U T O than that of N D U. Ogunsola and Okusaga (2006) were looking at the university libraries in the developing nations that include Nigeria and both authors saw lack of fund in the face of economic crunch of those nations and by implication, many of them could not acquire the current materials and this indirectly affects research and studying which academic institutions are known for. This pitiable situation is what Ikem (2001) described as a factor that hampered the provision of conducive environment for reading and research. For a librarian to play his role as information professional, there is the need to address these perennial problems as identified above which can be solved through the virtual libraries. The virtual libraries are out to address the challenges that are known with conventional libraries and provide a forum for effective teaching, research, and learning. Speaking further on the challenges before digital library in China which is also the picture of developing nations like that of Nigeria, Irechukwu (2007) citing Guihua (2002) gave the followings as inhibiting factors against its usage:

- Large amount of information to be digitalized.
- Absence of unified agreements on the issue of specification and standard.
- Construction of network infrastructure.
- The issue of copyright questions, management of personnel problems that is more pronounced in developing countries.
- Epileptic power supply, high density analogue telephone which has hindered unlimited access to I C T in most scholarly institutions.
- The issue of fund and policy that do not have government backing as well as poor availability of infrastructural facilities as captured by Anasi, (2010), Irechukwu, (2007) citing Iboma (2002).
- The high cost of building and maintaining digital libraries is another constraint before its usage in higher institutions in Nigeria which was seen by Waters (2005) as cited by Anasi, (2010).
- Growing students' ratio to the available e-resources. Many academic institutions in Nigeria and Africa as a continent

are having growing numbers of students yearly without corresponding e-resources to meet with the students' growing population. Looking at the situation at Makerere University, Musoke (2007) pointed out that the above constraints if addressed will assist the library to provide efficient services to its users and meet up with expected standard as stipulated by either professionals or institutional bodies that regulate academic programmes of various institutions of learning that house the library.

Implementation of I C T in Nigerian Libraries Scene

The usage of microform readers, an aspect of microform technology serves as the beginning of application of technology into the Nigerian libraries. The scenario was described by Aguolu, Haruna & Aguolu (2006). Apart from librarianship, other professions in Nigeria where e-resources have been adopted include banking, administration, production management, word processing and engineering (Nwachukwu, 1994). Libraries in Nigeria embraced information technology into their services rather than continue with the old and archaic method of service provision because it allows a proper record keeping and minimized human error. It also allows the sharing and dissemination of information among users of the resources globally.

Public Libraries

Public libraries are set up to serve members of the public that other libraries like academic libraries cannot meet their information need. They are often situated outside academic community of any institutions of learning in Nigeria. Public library, according to Olden, (1985) has not been at the forefront of library services in Nigeria and its users have been estimated approximately at 1% of the entire Nigerian populace. The library could not provide the information in modern ways which are common today due to total neglect and lack of financial support by the state governments that set them up. As a result of this neglect, it is difficult for the various state public libraries in Nigeria to adopt technological developments in their service provision because of the financial involvement which the state governments in Nigeria are not willing to embrace. This view was also buttressed by Ogunola (2008) when he stated that each of the states has its own State Library system but these are not well funded and the libraries are lacking in resources and are on the verge of

collapse because of government long neglect as a result of economic down-turn in the last two decades.

Special Libraries

These are set up by organizations that see the need to provide information for their clientele. In line with its name, special library has a special collections and clientele. The library is unique because it has a target user and its resources. Enyi (1991) noted that as at 1985, only the International Institute for Tropical Agricultural (I.T.T.A), Ibadan had succeeded in automating its library service. The automation gave the library an edge over other special libraries. The library became the first African research institute linking the worldwide network of Agricultural Research centers known as the Consultative Group on International Agricultural Research (CGIAR) which was formed in 1971. Apart from I.I.T.A library, other libraries had also follow the steps of I. I. T A. According to Nwalo, (2000) most prominent among them are the Nigerian Institute of Social and Economic Research (N. I. S .E. R.) library and The Development Policy Centre (D P C) library Ibadan. These libraries now provide e- resources to their numerous users.

I C T Facilities in Tertiary Institutions in Nigeria

The tertiary institutions, libraries according to Agboola, (2007) were the most developed library in term of human and material resources. Iwe (2007) and Zakari (1991) highlighted the evolution of computerization in some universities libraries namely; University of Ibadan, University of Nigeria Nsukka, Ahmadu Bello University, and Lagos State University to mention a few. These Universities have functional electronic resource facilities that aid e- library, virtual library, that assist the library to offer efficient services to their users. Apart from university libraries mentioned above, we also have some Polytechnics library that have automated their service. Achonna (2008) stated that the Yaba College of Technology library, Yaba, Lagos, a federal government established institutions introduced the e-journal in 2002 into its resources. The electronic service in this College of technology library is transforming the services provision from printed to electronic resources which also assist the librarians to evaluate their service position to help users to evaluate the effectiveness of the services rendered.

Provision of Information Service for Special Needs

Libraries this day according to Musoke (2007) need to go extra mile to cater for all users that include patrons with disabilities. Special provision should be made for these special users with disabilities to aid their learning in various field of study. The resources for these special learners are to be provided with the users in mind with appropriate format suitable for different disability of learners.

Benefits of Using Digitalised Library Services in Nigeria

Nigerian academic libraries have witnessed great changes since the translation from old method of service provision and delivery to a new method of digitalized library service. Both the users and providers of services have derived maximum benefits from its usage. Oyedokun, (2000) as cited by Irechukwu, (2007) highlighted some benefits if the government-owned research institutes that are digitalized in Nigeria.

- Promotion of scholarly publication.
- Promotion of Researchers' skills through digitalized library system.
- Assists the mother institutions in research activities.
- Preservation and storage of collections (Owoye and Oguntuase, 2008).
- Providing services that facilitate access to the available information (Eke, 2011).
- The problem of distance is taken care of, as users do not have to travel to library where printed resources are before using it.
- The various limitations with conventional library is addressed with digital library.

Prospects of Digital Library in Nigeria

The adoptions of digitalization in Nigeria academic institutions come with its challenges. The phenomenon of today's library system bears every mark of a future which manifests in digital system. Digitalization plays a prominent role in preservation and dissemination of knowledge in all human disciplines. Ani (2007) observed that there is high prospect for successful I C T integration and use in African libraries when the digitalized library system is fully adopted. While Fabunmi (2009) opined that Virtual library would improve the quality of teaching and research in higher

institutions in Nigeria through the provision of e- learning resources essential for such. In Nigeria, the daily routine operation of librarians and users has been enhanced through digital library as captured by Oyandongbon and Eke (2011) that avers that the work of librarian is speeded up with all the needed resources at the disposal of librarian available at the information resources centre called the digital library. Users are served without much delay. To therefore provide efficient service to patrons in this age of digitalized library services, librarians and their institutions need to upgrade the technical and human relations skills in order to remain relevant and attractive to patrons who are interested in efficient services delivery from the librarians or information professionals in Nigerian higher institutions that adopt various information resources with appropriate format that is appropriate for various users.

References

- Achonna,A (2008) Awareness, Access and Usage of E-journal Resources of the library, by the Students of Yaba College of Technology, Yaba –Lagos, Nigeria. *Samaru Journal of Information studies* .Vol. 8(1) Pp, 26-30.
- Aderonke, O. Otunla, Akanmu-Adeyemo, A (2011) Library Automation in Nigeria the Bowen University Eperience. *Library Philosophy and Practice*. Access on 20th August 2011
From: [http:// www.webpages.uidaho.edu](http://www.webpages.uidaho.edu).
- Agboola, A T. (2000) Five Decades of Nigerian University Libraries: A Review. *Libri* Vol.50 Pp.280-289.
- Aguolu, C. Haruna , I and . Aguolu,I (2006) “The Impact of Technology on Library Collections and Services in Nigeria,” in the Impact of Technology on Asian, African and Middle Eastern Library Collections, ed. R. Sharma Lanham, Md.: Scarecrow Press. Pp.145.
- Akintunde ,S (2006) State of I C Ts Tertiary Institutions in Nigeria: Window on the Universities. Paper presented at the 44TH Annual National Conference and Annual General Meeting of the Nigerian Library Association. Held at the National Centre for Women

- Development, Abuja June 18th – 23rd, 2006.
- Anasi, S (2010) Digital Libraries and Higher Education in Nigeria in the 21st Century.
Paper delivered at the 2nd Professional Summit on Professional Summit on information Science Technology, Held at the Nnamdi Azikwe New library Complex University of Nigeria. 3rd -7th May, 2010. 102 - 107.
- Ani, O.E. (2007). Information Communication and Technology (I C T) in Africa Librarianship: Problems and prospects. *Gateway Library Journal*.1 (2), 115 - 118.
- Chio, Y& Rasmussen, E (2006) What is needed to educate future Digital librarian *D-Lib Magazine*.12 (9), 1 - 9.
- Eke, H (2011). "Digitizing resources for University of Nigeria repository: Process and Challenges." *Webology*, 8(1). (Accessed on 20th November 2011) Available at <http://www.webology.org/2011/v8n1/a85.html>
- Enyia, C (1991). Computerization in Nigerian Libraries: A State of the Art Review," *International Library Review*, 23 159
- Fabunmi, B (2009) Challenges and Prospects of Virtual Libraries in Universities in Nigeria. *European Journal of Scientific Research*, 33(1). 202 - 208.
- Fabunmi, B. Paris, M. & Fabunmi, M (2006). Digitization of library resources: Challenges and implications for policy and planning. *International Journal of African & African American Studies*, 5(2), 23 - 36.
- Gbaje, E.S.(2007) Digitalization and its challenges: Digital Records and Archival Management Workshop for member's Federal capital Territory, Abuja, Archives and History Bureau Committee and Liaison Officers. Arewa House, Kaduna 3rd - 9th. June.
- Hussain, A (2008) Perceptions of LIS Professionals about Digital libraries in Pakistan: The Pakistan Perceptive. *Electronic Journal of Academic and Special librarianship* Vol. 9. No. 1.
- Igun, S. E. (2006) Human Capital for Nigerian Libraries in the 21st Century. *Library Philosophy and Practice*, 8 (2). Retrieved, 12th January 2010, from: <http://www.webpages.uidaho.edu>.

- Ikem, J. E. 2001. "A Policy Framework for Implementing Sustainable Virtual Library in Nigerian Universities." *Blueprint on the National Virtual Library Project*. Federal Ministry of Education. Lagos, Nigeria. Section C, 8.
- Iwhiwhu, B & Eyekpegha, E (2007) Digitalization of Nigerian Libraries: Case Study of University of Port-Harcourt and River State University of Science and Technology *Heartland Journal of Library and Information Science* 1(2), 111-112.
- Irechukwu, P (2007) The digital library: Prospect and Challenges to Developing countries. *Nigerian Library Link – A Journal of Library and Information Science* 5(1) 13-18.
- Iwe, J (2007). A Historical Perspective of Library Service in Nigeria: Problems and Prospects for the Future" *Global Journal of Humanities* 6,1&2. 34
- Musoke, M (2007) Strategies for addressing the University library users' changing needs and practices in Sub-Saharan Africa *pre-IFLA Satellite conference paper, August 2007* (Accessed on 23rd March, 2011) Available <http://www.ifla.org/1Vifla73/satellite.1Programme-en.pdf>
- Nkanu, W and Okon , H (2010) Digital Divide: Bridging the Gap through ICT in Nigerian Libraries. *Library Philosophy and Practice* (e-journal).
- Nok, Grace (2006) Challenges of Computerizing a University Library in Nigeria: The Case of Kashim Ibrahim Library, Ahmadu Bello University, Zaria. *Library Philosophy and Practice*. 8(2). Retrieved on 28th May, 2009 from <http://webpages.uidaho.edu%Embolin/Nok>.
- Nwachuku, M (1994) "Growth of Information Technology, Historical Perspective," *Development of Information Technology in Nigeria*.
- <http://www.unu.edu/unupress/unupbooks/uu19ie/uu19ie0e.htm#2> (15th March, 2011).
- Nwalo, N (2000). Collaboration in the provision and utilization of facilities for library and Information science education in Nigeria. Being a paper presented at the Biennial Conference of the National Association of library and information Science Educator (NALISE) Ibadan: National

- Association of library and information Science Educators
32-41
- Ogunsola, L. and Okusaga, O (2006) Developing Countries and the Need for Virtual Libraries: *Journal of Social Science*. 13(3). 221-229
- Ogunsola, L. (2008). "The Role of Library Facilities in the Public Policy Making in Nigeria" *Ozean Journal of Social Sciences*, 1, 1 (2008): 25.
- Okon, E O (2007) Information and Communication Technology (I C T) Revolution in Africa
Librarianship: Problems and Prospects. *Gateway Library Journal*.10 (2) 119-126.
- Olden, A (1985). "Constraints on the Development of Public Library Service in Nigeria." *Library Quarterly* 55,4(1985): 398.
- Owoeye, J & Oguntuase, Z (2008) Digitalization of library Information Resources as Solution to Preservation and Conservation Problem in Libraries. *Owena Journal of library and Information Science* 3(1), 20-27.
- Oyandongbon and Eke (2011) Factors Affecting Student Use of Information Technology: A Comparative Study of Federal University of Technology, Owerri and Niger Delta University, Amazon . *Library Philosophy and Practice*. Retrieved, 12th June, 2011.
- Ugwu, C & Ekere, J (2010) Training needs of Librarians for Digital Library Project in University Libraries in Nigeria: A case study. Paper delivered at the 2nd Professional Summit on Professional Summit on information Science & Technology, Held at the Nnamdi Azikwe New library Complex University of Nigeria. 3rd -7th May, 2010. 217-221.
- Zakari, M. (1991) "The Automation of Academic and Special Libraries in Nigeria: The State of the Art." *International Library Review* 23(1991): 65-72.