

## THE IMPLEMENTATION OF VIRTUAL LIBRARY PROJECT: THE FOUNTAIN UNIVERSITY EXPERIENCE

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### ABSTRACT

Fountain University library fits into the world of innovation by encouraging information and communication technology. This paper reported how effort was made by Fountain University library for the enactment the virtual library, the various challenges, and the actualization of the virtual library. The challenges include erratic power supply and computer systems are capital intensive and need funds to keep the project going, shortage of managerial and technical expertise in Nigeria, there is a need for greater commitment within academic circles, librarians to undertake training, and retraining in computer literacy, copyright holders have to be contacted and rights obtained. The paper thus concluded that there is still much to be done on virtual library in Fountain University.

**Keywords:** Virtual library, Fountain University, Private University.

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### INTRODUCTION

Information materials and services of libraries were in traditional ways, but in past 50–70 years, libraries have sincerely developed library services that exist without a physical building. The terms virtual library are used to refer to the vast collections of information to which people gain access remotely. The world is going through an IT revolution that has drastically changed many facets of the human life, from education, industry, economy, and politics to entertainments. The roles of university libraries as sources of learning, education, innovation and research, tools for social development, and as means of communication have become seriously eroded. It was suggested that for university libraries to cater effectively for the social, cultural, and developmental needs of library users in Nigeria, the virtual library has to be put in place.

Virtual library has capabilities of the information technology to process, store, refine and disseminate data, information, and knowledge in a variety of ways across geographical boundaries had changed the ways in which the public and the private university libraries operate globally. The National University Commission has mandated the establishment of virtual libraries in all higher institution of learning in Nigeria because of the high value placed on the availability of information. The increasing acceptance of virtual library might be due to the diverse resources that they contain the options for what they can include are virtually endless, as well as becoming more and more boundless as technology advances. The e-libraries are “a set of electronic resources and associated technical capabilities” and that are designed to serve specific users community (Buckland, 2012).

In the same vein, Gani and Magoi [3] submitted that the existence of virtual library indicates that library services would be available to anyone, at any time or place, to access a library's enormous book collection using the Internet. It is even believed that one can use all the books in a library's collection without actually going to the library.

Trivedi [11] defined virtual library as “a library in which collections resources are stored in digital formats (as opposed to print, microform, or other media) and accessible by computers or electronically.” Gapen [4] stated that, virtual libraries as the concept of remote access to the contents and services of libraries and other information materials. Digital library and virtual library are used interchangeably. The term “virtual library” or “library without physical walls” usually refers to

the meta resources, subject portals that extend the virtual accessibility of digital collections from several diverse sources without the clients even aware where the materials actually reside. Li and Furht [6] stated that digital libraries are systems that combine the machinery of digital computing storage and communication, in which the content and software needed to reproduce, emulate, and extend that services of collecting, cataloging, finding, and disseminating information offered by traditional libraries based on paper and other materials. A virtual library would potentially be enormous, linking huge materials from all around the globe, or it could not be much but consisting of few hundred links to digital resources maintained by an individual. Okiy [10] quoting Covi and Cragn (2004) in their own view opined that Nigerian tertiary institutions have increasingly demanded and preferred access to electronic sources delivery and networked information from their respective libraries. This is why librarians must endeavor to equip themselves with technological skills that will be useful for their jobs.

The application of information and communication technology has aid all facets of world system such as knowledge dissemination, social interaction, business practices, political engagement, media, education, health, leisure, and entertainment. Ani [2] agrees that the application of ICT in library and information services facilitates the provision of timely information in the universities which lead to maximal benefit and increased research productivity. Foster *et al.* (2008) and Frankor and Akussah (2012) similarly conclude that if staff and students in universities in developing countries, especially in Africa have access to relevant electronic information resources, it is likely to improve the quality of their research and promote an increase in research productivity and publication. Adeniran [1] sums it all that correct application of information and communication technology is drastically affecting all facets of the world system which includes the library institutions. These innovations are forming the bedrock for libraries' transition to environments of electronic services which are built on computer networks.

In furtherance, Makhanya [7] affirms that libraries that have applied information technology in their services have experienced dramatic transformations. Ogunsola [9] stated that libraries went through a metamorphosis from a manual system to a technologically driven. The technology-driven environment has enveloped the library and is taking it to unprecedented heights in knowledge acquisition, management, and communication. Okiy [10] stated that the main duty of academic libraries is to make available the necessary information to the lecturers

and students to achieve their teaching learning and research needs in the easiest, fastest, and most comprehensive way.

Mishra [8] stated that the advantages of virtual libraries as a means of easily and rapidly accessing information materials of various types are now widely recognized by commercial interests and public bodies alike. Traditional libraries are limited by storage space; virtual libraries have the potential to store much more information, simply because digital information requires very little physical space to contain it. As such, the cost of maintaining a virtual library can be much lower than that of a traditional library. An important advantage to digital conversion is to highly increased accessibility to users. They make information resources available to individuals who may not be traditional patrons of a library, due to geographic location.

In view of the historical trend of virtual library in Nigeria private universities, this study seeks to reports the effort made by Fountain University to put in place a functional virtual library, the operation, services, and the constraints facing the virtual library.

#### **VIRTUAL LIBRARY AT FOUNTAIN UNIVERSITY**

The step toward the virtual library of Fountain University library started in October 2009. The virtual library which started with 29 brand-new computer sets, running of internet cables, 30 cardboard furniture paper tables with chair sets, 3 horsepower of air conditioners, 1 server rack, 3 ceiling fans, 2 printers and 2 scanners, 30 uninterrupted power supply, etc. The space for the virtual library was carved out of the main reading room. The lighting was properly and carefully designed by the works department o the institution. The distribution of internet signals to the virtual library was done at the ICT unit of the university.

It should be noted that the digitization of all lectures and speeches emanating from the university was embarked on at the virtual library.

The virtual library thereafter subscribed to EBSCOhost electronic database for the provision of access to eBooks and electronic journals to both staff and students of the institution. The virtual library also provides access to free online databases for the use of the university community. Staff and students were engaged in proper training which lasted for months.

#### **THE EXPECTED ATTAINMENT OF GOALS AND OBJECTIVES**

The expected attainment of goals and objectives of the virtual library is to give direct access to information resources, in a structured and authoritative manner and thus to link information technology, education, and culture in contemporary library service. To attain those goals and objectives, the following were pursued:

1. Supporting digitization, access to and preservation of cultural and scientific heritage of the institution.
2. Providing access to information resources in the library while respecting intellectual property rights.
3. Creating interoperable virtual library systems to promote open standards and access.
4. Supporting the pivotal role of libraries and information services in the promotion of common standards and best practices.
5. Creating awareness of the urgent need to ensure the permanent accessibility of the digital material.
6. Linking virtual libraries to high-speed research and development networks.
7. Taking advantage of the increasing convergence of communications media and institutional roles to create and disseminate digital content.
8. The virtual library is available wherever there is a personal computer connected to the network. Therefore, it can be accessed at work places and in the home.
9. In digital library environment, it is possible and easier to provide access to information resources in other formats that are not possible in the print format environment, i.e., multimedia formats such as video and audio.

10. Improve the use of globally distributed, networked information resources.

#### **CHALLENGES OF STARTING VIRTUAL LIBRARY AT FOUNTAIN UNIVERSITY**

Virtually most academic libraries in Nigeria face series of challenges when establishing a virtual library. This has not excluded Fountain University library. Fountain University being a private university is being run with meager fund generated through payment of tuition fee. In view of this, the issue of funding was found to be a major challenge in starting and maintaining a virtual library in Fountain University. Furthermore, there were issues regarding technologies challenges; building and sustaining a virtual library requires the proper technological infrastructure. This infrastructure includes telecommunication, servers, application platforms, and software applications.

Another major setback was the poor state of power generation. Regular power generation remains a problem. Frequent power outages constitute a serious bottleneck to the virtual library. The cost of running generating plants is exorbitant. It was also observed that there is a need for greater commitment within academic circles by librarians to undertake training and retraining in computer literacy. There were challenges to find ways of preventing access to pornographic materials and criminal technologies which litter the internet, particularly workstations located in the library. Other challenges include the ability of the institution to continue to fund the project.

#### **RECOMMENDATIONS**

The following recommendations were made for the sustainability of the virtual library project:

- Need for a stable and constant power supply is necessary for this gesture.
- Provision of uninterrupted internet connectivity in the institution.
- The librarians and information professionals involved in building the virtual should be trained in information and web technologies skills. With the dynamic nature of digital technology, they must constantly learn web development technologies through professional development, conferences, and workshops.
- Librarians should make the formation of a library consortium very critical to building a successful virtual library project.

#### **CONCLUSION**

Efforts of the founders and the university management for the establishment of virtual library have started yielding results. The emergence of virtual library has greatly improved the quality of teaching and research conducted by staff and students of Fountain University. It has also provided access to e-databases for teaching and research. Finally, there is still much to be done in the virtual library to ensure that more access points are provided to cater for the ever-growing number of students in the institution.

#### **REFERENCES**

1. Adeniran. P. The challenges of successful implementation of virtual libraries in academic libraries in Nigeria. *Int J Acad Lib Inform Sci* 2014;2:46-50. Available from: <http://www.academicresearchjournals.org/IJALIS/Index.htm>.
2. Ani O. Accessibility and Utilization of Electronic Information Resources for Research and its Effect on the Productivity of Academic Staff in Selected Nigerian Universities between 2005 and 2012. PhD Thesis, Information Science, University of South Africa; 2013.
3. Gani E, Magoi JS. The Emergence of Digital Libraries Services in Northwest Nigerian Universities: Challenges and Prospects. *Library Philosophy and Practice* (e-journal); 2014. Available from: <http://www.digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3071&context=libphilprac>.
4. Gepen DK. The Virtual Library: Knowledge Society and the Libraries; 2007. Available from: <http://www.haworthpress.com/store/E-text/view/>
5. IFLA/UNESCO Manifesto for Digital Libraries. Available from: <http://>

- www.ifla.org/publications/iflunesco-manifesto-for-digital-libraries.6.
- Li X, Furht B. Design and Implementation of Digital Libraries; 2014. Available from: <http://www.cse.fau.edu/borlo/chpter18ic.pdf>.nd. [Last accessed on 2017 Dec 31].
7. Makhanya MS. Domestic Trends in Distance Education: Threats and Opportunities Discussion on the Launch of the New White Paper of Higher Education; 2014. Available from: <http://www.unisa.ac.za/news/wp-content/uploads/2014/02/PROF-MS-MAKHANYAwhite-paper-discussion-7-February-2014-2-final.pdf>.
8. Mishra RK. Digital libraries: Definitions, issues, and challenges. Innov J Educ 2016;4:2.
9. Ogunsola LA. The Next Step in Librarianship: Is the Traditional Library Dead? Library Philosophy and Practice (e-journal); 2011. Available from: <http://www.digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1638&context=libphilprac>.
10. Okiy RO. Globalization and ICT in Academic Libraries in Nigeria: The Way Forward. Library Philosophy and Practice; 2010. Available from: <http://www.webpages.uidaho.edu/~mbolin/okiy.htm>.
11. Trivedi M. Digital libraries: Functionality, usability, and accessibility. Library philosophy and practices. Electron Lib 2010;18:12-20.