

ISSUES AND INSIGHT INTO DIGITIZATION OF LIBRARIES IN NIGERIA

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Abstract

The digitization of library materials is now an established and has been instituted throughout the world programmes which convert holdings to digital form in order to allow wider access and better preservation. This paper examines the role of libraries. Government policies on digitization of libraries through NITDA, in conjunction with UNESCO, were highlighted. Issues and challenges with digital libraries in Nigeria in the areas of technical architecture, building digital collection, digitization, copyright and right management also examined. This paper reiterated the primary goal of digital library in bringing a wide range of resource materials to as large audience as possible.

Introduction

New technology is changing the world. The library has the opportunity to be at the forefront of that change though the development and use of technology (Gregory, 1991). The related tasks for library involvements in these developments are:

- » To upgrade existing services by making use of technology;
- * To plan and develop new services and products which make use of technology;
- * To study library users,, anticipating and meeting their changing information needs.

To remain viable and competitive in the twenty-first century, the library must both meet the needs of users and maintain a favourable position relative to other information providers.

Gregory (1991), observed that the digital electronic library is not limited to books and periodicals. Services; now offered by commercial information and entertainment industries are indicative of the information intensive environment in which libraries operate and the changing needs ; and desires of their users.

With the arrival of computers, the concept centered on large bibliographic databases, the now familiar online retrieval and public access systems that are part of any contemporary library. When computers were connected into large networks forming the internet, the concept evolved again and research turned to creating libraries of digital information that could be accessed by anyone from anywhere in the world phrase like "virtual library" electronic library" library "without walls" and most recently "digital library" all have been used interchangeably to describe this broad concept, Gary (1998).

Exploring a Digital Library ;

Harnessing technology and innovation, and leveraging the intellectual and cultural resources is the bane of digitization of libraries in Nigeria. Though, this is not fully in operation in this part of the world, unlike in the advanced countries. For instance, California Digital Library which is one of the largest digital libraries in the world has been able to support the assembly and creative use of the world's scholarship and knowledge for the libraries and the communities they serve. Another example is the CAB, International which has a compendium of abstracts digital library. Abstract journals have been collected, into a computerized database, called CAB Abstracts. These abstracts are available through a variety of electronic media such as:

- * Online through commercial database vendors
- + On CD-Rom
- * On floppy disk, magnetic tape and in other electronic formats.

This digital library system is user friendly more accurate with ease of accessibility. It could be accessed online or via the CD-Rom and other electronic devices.

The Role of Libraries

Stephen, Carol and Cestantraa (2005), identified the role of libraries as thus:

- * **Scholarly Materials:** acquiring, managing, preserving, and providing comprehensive access to scholarly materials of enduring value in all formats, subjects etc.
- * **Services for Teaching and Learning:** Promoting the highest-quality instructional and educational outcomes through.
- * **Information literacy programs**
- * Instructional collaboration
- * Study services and facilities
- *• Integration of content with instructional technologies and new forms of teaching

Collaboration: cooperating and sharing efforts and resources to

- » Create economic efficiencies by sharing content, services, and facilities among the users » Harness emerging technology in support of support of content and service development.

What is Digital Library?

Gary (1998), described Digital libraries as organizations that provide the resources including the specialized staff to select structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and" ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities. It is clearly shown that digital libraries are not just world wide web or internet connectivity as many people use to think, but it is far more, than that. In his own contribution, Chespesuik, (1997), highlighted the characteristics of digital libraries as stated below:

- * Digital libraries are-the digital face of traditional libraries that include both digital collections and traditional "fixed", media collections. So they encompass both electronic and paper materials
- *• Digital libraries will include all the processes and services that are the backbone and nervous systems of libraries. However, such traditional processes, though forming the basis of digital library work, will have to be revised and enhanced to accommodate the differences between new digital media and traditional fixed media.
- * Digital libraries ideally, provide a coherent view of all the information contained within a library, no matter, it's from or format.
- * Digital library will: require both the skills of libraries as well as the of computers scientists to be viable.

Digital Libraries in summary enable the creation, organization, maintenance, access to, sharing and preservation of digital document collections.

Insight into Digital Libraries

Libraries have, traditionally dealt with the organization and provision of access to physical material like print on-paper, publications. Library automation has actually helped libraries provide improved access to their "•", collections. However, online access has largely been limited to the computerized library

catalogue (OPAC). Digital Libraries, however differ significantly from such libraries because they enable users to gain access to work with electronic versions of full text documents and their associated usages.

Digital Libraries basically store materials in electronic format and manipulate large connections of these materials effectively. Yannis (2005), said digital libraries can be viewed from a number of perspectives; they can be new forms of information institutions, multimedia information retrieval system, or information systems that support the creation, use and searching of digital content. Digital libraries are not an end in themselves, digital assets management, electronic commerce, electronic publishing, teaching and learning, and specific applications. However, the methods and metrics for evaluating digital libraries will vary by whether they are viewed as institutions, as information systems, as new technologies or as new services.

Benefits of Digital Libraries

The following are the benefits of Digital Libraries as perceived by the FAO/UNESCO (2005),

- Always available- they are typically accessed over all internet and web. They can thus be accessed from virtually anywhere and at any time. They are not tied to a physical location and operating hours of a traditional library. Digital library collections can also be delivered on CD-ROM media to users with inadequate network connectivity.
- Improved Access-Availability of full text electronic documents enable digital libraries to support advanced and novel search and display features including full text search, relevance ranking, and hierarchical document browsing.
- Wider Access- a digital library can meet simultaneous access requests for the same electronic document by easily creating multiple instances (or copies) of the requested document. A digital library can thus meet the requirement of a much larger population of users.
- New forms of Access- A digital library can provide access to content in different and more appealing forms including animation, graphical, audio, and video formats; support post processing of information (e.g. conversion of spread sheet to graphical form), and adapt to the special needs of physically disadvantaged users.
- Improved Information sharing- through appropriate metadata and information exchange protocols, digital libraries can easily share information with other similar digital libraries and provide enhanced access to users.
- Improved presentation -Since electronic documents are not prone to physical wear and tear and their exact copies can easily be made, digital libraries facilitate presentation of special and rare documents and artifacts by providing access to digital versions of these entities.

Government Policy on Digital Libraries

Government is making frantic effort in improving Information Communication Technology infrastructure in Nigeria. This is corroborated by the establishment of the National Information Technology Development Agency (NITDA). This body is charged with the responsibility of promoting awareness and ensuring Information Communication Technology compliance by all the governmental ministries and agencies. The digital library initiative has been an attempt by Nigeria government to address the chronic dearth of books and journals in Nigeria higher education educational institutions as well as opening up of awareness to vast learning resources available elsewhere. This initiative has been conceived by the NUC, NBTE and NITDA as a collaborative effort which is aimed at establishing digital libraries in virtually all Nigerian higher Institutions

NITA in conjunction with UNESCO have organized several training workshop for the libraries and other information professionals in the area of digital library, to enable them benefit from enhanced information services which the digital libraries stand to offer.

Infra and Info Structure for Digital Libraries

It is pertinent to mention here the structures that must be on ground for a digital library in terms of infra, info and personnel. These are:

- Computer system
- Database managements system
- Internet protocols

- Trained computer personnel
- Information personnel, Documentalists, etc.
- A well ventilated building
- A stable source of power
- A good backup system

Issues and Challenges of Digital Libraries in Nigeria

Creating effective digital libraries poses serious challenges. Gary (1998), observed that integration of digital media into traditional collections will not be straightforward. Some of the associated problems are as follows:

- » **Technical architecture:** The first issue is that of the technical architecture that underlines any digital library system. Gary (1998), believed that libraries need to enhance and upgrade current technical architectures to accommodate digital materials.
- f Building Digital Collection:** One of the largest issues in creating digital libraries will be the building of digital collection. Obviously, for any digital to be viable, it must eventually have a digital collection with the critical mass to make it truly useful.
- * **Digitization:** One of the primary methods of digital collection building is digitization. This simply means the conversion of any fixed or analogue media such as books, journals, article, photos. Paintings, microforms into electronic form through scanning, sampling or infact even re-keying (Gary, 1998), an obvious obstacle to digitization is that it is very expensive.
- * **Material:** It is another issues central to the development of digital libraries. Metadata is the data that describes the content and attributes of any particular item in a digital library. H is a concept familiar to librarians because it is one of the primary things that librarians do.
- * **Copyright/right Management;** copyright has been the called the "single most vexing barrier to digital library development". (Chepesuik, 1997:49). The concept of copyright breaks down in the digital environment because the control of copies is lost. Digital objects are less fixed. Easily copied and remotely accessible by multiple users simultaneously.

Recommendations

To have functional digital library in Nigeria, Government and oilier stakeholders should ensure that:

1. Librarians are computer literate unlike the traditional librarianship
2. Training workshops and seminars are organized for the librarian on the issue of digitization to ensure conformity with what is going on around the world.
3. Enabling infrastructure are put in place by all stakeholders.
4. Nigeria Library Association and the allied bodies should come out with a plan of action on the issue of digitization of libraries in Nigeria.
5. Adequate funding is provided for Institutions to embark on digitization project.

Conclusion

The Librarian had the opportunity to be a leader of innovation for information resources. The digital Library is not just a place to get a book or ask reference question, it is a vital part of the information society. Libraries have discovered that with a few exceptions, making a business case for digitization and investment in digital technology is more difficult than first envisioned, especially, given the technical constraints that must first be overcome.

References

Chepcsuik, R. (1997). The future is here: America's libraries go digital American libraries, 2 (1), 47-49.

Evaluation of digital libraries: testbeds measurements and metrics
<http://www.sztaki.conferences/deval/index.html>

FAO/UNESCO (2005). Information Mgt resource kit in digitization and digital libraries. CD-ROM version

Gary Cleveland digital librarians
<http://www.ijla.org/iv/5/op/udlop8.htm>

Gary, C. (1998). Digital librarians
definition issues <http://www.ifla.org/iv/5/oi/itdtot8.htm> accessed
3/6/2006. and challenges and challenges Gregory, B. N.
the digital electronic library <http://www.wjfla.org/iv/5/op/itdtot8.htm>
Perseus digital library <http://www.perseus.tufts.edu>

Yannis L. (2005). Digital libraries at a crossroads Published
online 22, July 2005. <http://www.digital/edu>.

