Transition of Physical Library to Digital Library in Federal University of Oye-Ekiti

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Abstract: *This study examined transition of physical library to digital library in Federal University of Oye-Ekiti, Ekiti State. The shift from physical libraries to the digital is not merely a technological evolution, but requires a change in the paradigm by which people access and interact with information. The study discovered that digital library has changed interaction between librarian and library users, revealed the contrast between physical library and digital library and advantages of physical library over digital library. The study recommended that university libraries in Nigeria should adopt integrated system based on the latest web 4.0 and other data search and presentation standards which is a unified way of searching and presentation of result.*

Keywords: Digital Era, Digital Library, Federal University of Oye-Ekiti, Library, Physical Library, Traditional Library, Nigeria

1. Introduction

The advent of information and communication technology has transform access to library resources from physical access to electronic access in the modern time. This global development has posed challenges to libraries and information institutions in their attempt to meet information needs of user in the digital era. Libraries are now investing heavily on electronic resources especially academic libraries where users are exposed to various electronic resources to enhance their academic performance. This development is noticeable in the developed nations of the world as African countries and other developing nations are still struggling to bridge the digital gap that is preventing them from the full benefits of electronic era. This device is championing transition from physical library (Traditional library) to digital library in Nigeria Tertiary institutions. However, different efforts have been made to lunch African Universities into the digital society with different initiatives by both National and International bodies toward providing the required networked infrastructure that would enable them have access to free or heavily discounted Journals and databases through programmes like AGORA, elFL, HINARI and PERI (Rosenberg, 2005).

The shift from physical libraries to the digital is not merely a technological evolution, but requires a change in the paradigm by which people access and interact with information. Gore, (1998) opined that "A new wave of technological innovation is allowing us to capture, store, process and display an unprecedented amount of information about our planet and a wide variety of environmental and cultural phenomena.

A physical library is characterized by the following: emphasis on storage and preservation of physical items, particularly books and periodicals cataloging at a high level rather than one of detail, for example author and subject indexes as opposed to full text browsing based on physical proximity of related materials, e.g., books on sociology are near one another on the shelves, passivity; information is physically assembled in one place; users must travel to the library to learn what is there and make use of it. By contrast, a digital library differs from the above in the following ways: emphasis on access to digitized materials wherever they may be located, with digitization eliminating the need to own or store a physical item, cataloging down to individual words or glyphs, browsing based on hyperlinks, keyword, or any defined measure of relatedness; materials on the same subject do not need to be near one another in any physical sense, broadcast technology; users need not visit a digital library except electronically; for them the library exists at any place they can access it, for example: home, school, office, or in a car.

A digital library is a library in which collections are stored in digital formats (as opposed to print, microform, or other media) and accessible by computers. The content may be stored locally, or accessed remotely. The Digital Library Federation defines 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 available for use by a defined community or set of communities" (Shiri 2003). This paper is aimed at investigating transition of physical library to digital library in Federal University of Oye-Ekiti, Ekiti State. This paper is divided into five sections, the part 1 is the introduction, part 2 is the review of literature, the part 3 discusses on the contrast between physical library and digital library, the part 4 examines the Interaction between Librarians and Library Users in Digital Era and part 5 focuses on conclusion and recommendation.

2. Review of Literature

The appearance of the ICT and the evolution of World Wide Web (WWW) enabled people to use the Internet for many reasons; for communication, for entertainment, for education, and so forth. Friedman (2005) says: "Never before in the history of the planet have so many people, on their own, had the ability to find so much information about so many things and about so many other people" while Bradley (2010) says that "…all technology is for humans" (p.183).

Now, in the 21st century, with the emergence of ICT & Web 2.0 technologies, libraries have a new, more dynamic role in knowledge society and as the individual is affected by ICT, in the same way, the individual can also influence the technology (Bradley, 2010). Libraries began to recognize the presence of the web experience and utilize such services in order to create a *new environment* for libraries' users where interaction plays a basic role. "Interaction means that technology interacts with social world with values and beliefs" (Bradley, 2010, p.184).

These services have also reformed academic libraries which face greater demand for access to resources; they should store all kind of material forms; the librarians have to task crucial duties and roles in disseminating and sharing of knowledge and users need to transfer information inside and outside of the walls of a library. Hence, university libraries would be upgraded and becoming digital.

Digital libraries, Institutional repositories and Open Archives are the new trend in the present era, satisfying users' needs for precise information since they have become more information conscious for accessing electronic information compared to different purposes such as academic or research needs. According to Fabunmi, Paris, and Febunmi (2006), Library Digitization has become part of the work of librarians, and most libraries are involved in digitization projects.

The revolution in technology has brought about critical changes and a demanding environment in academic libraries. The introduction of technology in libraries has changed the way librarians work, their duties and their roles. In the past, traditional libraries were physical buildings where users could visit them and find printed books. Traditionally, the librarians were responsible for the collection development, for the material processing and the provision of services without using computers. Nowadays, academic libraries make use of technology. They provide not only printed material but also digital material that is born digital and material that is digitized (converted from analog to digital). The introduction to the digital era in libraries, created the need to computerize most of the operations. Technology has changed the way traditional librarians used to do work. Nowadays, librarians use technologies to acquire, catalogue, preserve, diffuse, provide reference services and so on. This doesn't mean that traditional libraries will stop existing. Traditional libraries as buildings will continue to exist for many years and support the digital libraries. Thus, traditional libraries co-exist with digital libraries. This means that librarians play and will continue to play a significant role in libraries. It is important for librarians to keep a balance between their traditional role and the digital role.

"Digital libraries are 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 collection of digital works" (Schwartz, 2000). Thus, people can make use of the resources easily and economically (Schwartz, 2000).

The term digital library was first used by the computers scientists referring to the electronic version of a library; and the truth is that the term digital library explains nothing more than the nature of its collection. "A digital library is a collection of digital representations of numerous types of media, such as documents, images and sounds that are stored in an information repository and are available through a local computer network or anywhere via the internet" (Slovney, 2004).

Lynch (2005) comments that digital library can be of worth to various people such as engineers, technicians, social scientists and another diversity of scientists whereas Hughes (2004) recommends "everyone can search, browse and compare materials in useful and creative ways". In this way, creating a digital library is a very good solution.
According to Hemlata and Meena (2013) Digital libraries have their basic characteristics compared to traditional libraries and are the follows:
(a) *Digital library is a digital object,* and can be merged with others.
(b) *Digital library provides faster access to information,* because it provides advanced search and hyperlinks for navigation.
(c) *Digital library enables easy management of large amounts of data,* because it provides access to a large and wide amount of information resources.
(d) *Digital library collections are fixed permanently,* in order to provide useful and understandable information to the users.
(e) *Digital library supports formal and informal learning procedures,* as it provides access to both basic and secondary educational sources.
(f) *Digital library can be accessed by any user from any workplace,* since it provides a user-friendly system.

3. The Contrast between Physical Library and Digital Library

Traditionally, libraries were collections of books, manuscripts, journals, and other sources of recorded information. In the last 50 years, libraries have increasingly developed into a provider of information resources and services that do not even require a building. The terms digital library and virtual library are used to refer to the vast collections of information to which people gain access remotely.

As society values information more and more, the information industry has developed. It encompasses publishers, software developers, online information services, and other businesses that package and sell information products (*Encyclopedia Britannica Online*, 2007). It provides both an opportunity and a challenge to libraries. Although the development of digital libraries means that people do not have to go to a building for some kinds of information, users still need help in locating the information they want. In a traditional library, the catalogue is used to find traditional library materials, but much of the information that the Internet offers cannot be found through one commonly-accepted tool or resource. The increased availability of electronic information has led libraries and librarians to develop important relationships with computer centres. In some places, the computer centre is responsible for electronic information and the library is responsible for print information. In some educational institutions, librarians have assumed responsibility for both the library collection and computer services.

The changes in libraries and the roles of librarians originated in the US and other English-speaking countries, but electronic networks do not have geographical boundaries; and their influence has spread rapidly. With Internet connections across the globe, people who did not have access to traditional library services now have the opportunity to get information about all subjects, free of political censorship. Increasingly librarians have assumed the role of educator to teach users how to find information both in the library and over networks. Traditional libraries and librarians exist alongside the electronic libraries which are eroding the functions of both traditional, libraries and librarians.

Table 3.1. Contrast between Physical and digital libraries is presented below.

Physical Libraries	Digital Libraries
Print collection	All resources in digital form.
Stable, with slow evolution	Dynamic and ephemeral
Individual objects not directly linked with each other.	Multi-media and fractal objects
Flat structure with minimal contextual metadata	Scaffolding of data structures and richer contextual metadata
Scaffolding of data structures and richer contextual metadata.	Scaffolding of data structures and richer contextual metadata.
Scholarly content with validation process	More than scholarly content with various validation processes
Limited access points and centralized management	Unlimited access points, distributed, collections and access control
The physical and logical organization correlated	The physical and logical organization may be virtually
One way interactions	Dynamic real time dialogue
Free and universal access	Free as well as free based

(Source: Library Philosophy and Practice, 2010)

Functions of Digital Library

➢ Access to large amount of information to users wherever they are and whenever they need it.
➢ Access to primary information sources
➢ Support multimedia content along with text
➢ Network accessibility on internet and internet
➢ User-friendly interface
➢ Hypertext links for navigation
➢ Client-server architecture
➢ Advanced search and retrieval
➢ Integration with other digital libraries
➢ It is easier and more convenient to use

Advantages of a Digital library over a Traditional library are listed below:

➢ Nearly unlimited storage space at a much lower cost
➢ Re-allocate funds from some staff, collection maintenance, and additional books.
➢ No physical boundary
➢ Round the clock availability

- ➢ Multiple access
- ➢ Enhanced information retrieval.
- ➢ Preservation for some print material
- ➢ Added value
- ➢ Universal accessibility

Shortcomings of a Digital Library

- ➢ Lack of constant and consistent power supply and Internet facilities
- ➢ Lack of preservation of a fixed copy (for the record and for duplicating scientific research)
- ➢ Lack of preservation of "best in class"
- ➢ Difficulty in knowing and locating everything that is available, and differentiating valuable from useless information.
- ➢ Job loss for traditional publishers and librarians
- ➢ Costs are spread and many become hidden.
- ➢ Lack of screening or validation

A general idea is that a digital library is cheaper than traditional one; but, creating a digital library means creating a complete organization of machines and people; and is an expensive project. Digitization tools are not cheap. Financial budgeting plays a crucial role in development of digital libraries because no matter what library professionals want to do, or what are the user's needs, money is the source of all decisions (Kastellec, 2012). According to Fabunmi, Paris and Febunni (2006), as detailed below, budgets for digitization projects should include:

(a) salaries,

(b) staff training,

(c) digitization equipment,

(d) legal fees,

(e) overhead and indirect costs,

(f) communication fees,

(g) contingency.

4. The Interaction between Librarians and Library Users in Digital Era

Traditional librarians differ from the digital librarians in the way they provide services. Traditional librarians provide services focusing on printed catalogs and books. Nowadays, librarians having conformed in the digital era are supposed be able to use the newest technology, to organize and diffuse data in a digital form, to manage digital material, to provide information services in a digital form, provide digital reference services, to anticipate how technology concerning the library can be improved in the future and so on. Academic librarians are supposed to have various technological skills in order to provide services to students. We will present the most important skills that librarians need to have according to us.

Nowadays, librarians provide both analogue and electronic services. Thus, in order to deliver electronic services to users, they have developed various digital skills. Many academic librarians have the knowledge and experience in "accessing, searching, browsing, navigating, retrieving, indexing, storing, organizing and dissemination of digitized information." (Sreenivasulu, 2000). Moreover, librarians' role is not only to provide services to users but also to advise them on how to use analogue and digital material effectively. Thus, librarians can consult library users on what digital library tools (i.e. OPAC catalog, databases) to use so as to access the right information. Academic libraries provide various e-services to users. The access to e-services does not require the physical presence in the library.

Furthermore, we could say that librarians have the role of preservator. Nowadays, many libraries present material in a digital form. Additionally, many academic librarians have the knowledge on how to preserve the digital material for future usage. When we talk about preservation we mean to preserve the access to the information (the format that contains the documents might become out-of-date) and to preserve data that are placed in technological devices.

The role of a librarian is not only to assist the users' find the information they need but also teach them on how to find what they wish on their own. The rapid development of technology and the introduction in academic libraries has changed the librarians teaching role and has affected the "tools, and methods of teaching." (Julien and Genuis, 2011) Librarians can organize training programmes so as to educate users on how to use the electronic resources of the library in the right way.

According to Chen and Lin (2011) "information literacy has been generally defined as an understanding and set of abilities enabling individuals to recognize when information is needed, and to have the capacity to locate, evaluate, and use effectively the needed information". Users are educated to acquire the adequate skills and knowledge of seeking and using printed or digital

material effectively and ethically. "Designing instructional and educational programs and classes to assist patrons in using library services and learning information literacy is absolutely essential to gaining the necessary skills (trade) and knowledge (profession) for lifelong success." (Bell and Shank, 2004).

Users can have access to the digital material inside and outside the library. Nowadays, academic libraries offer the opportunity to have access to the electronic resources from anyplace at anytime. This means that users can visit the library alone even from their home. Nowadays, students make extensive use of the web so as to find the information they need. The internet provides them the latest digital material for usage. According to Chen and Lin (2011) "digital technologies enable ultra-rapid access to the richest sources, wherever they are located in the world's collection".

5. Conclusion and Recommendation

This study examined transition of physical library to digital library in Federal University of Oye-Ekiti, Ekiti State. The study discovered that digital library has changed interaction between librarian and library users, revealed the contrast between physical library and digital library and advantages of physical library over digital library. The following recommendations are necessary.

- ➢ Librarians and information professionals involved in building the Virtual Library should be trained in information and web technologies skills. With the dynamic nature of digital technology, they must constantly learn and retool in information and web development technologies through professional development, conferences and workshops.
- ➢ University libraries in Nigeria should adopt integrated system based on the latest web 4.0 and other data search and presentation standards which is a unified way of searching and presentation of result.
- ➢ To help address the cost of electronic resources and proprietary software, the government of Nigeria should encourage the use of open source software and open access electronic resources.

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