# REFINING OF ACADEMIC LIBRARIES TOWARDS DIGITAL SOCIETY FOR SUSTAINABLE DEVELOPMENT

SAHABI, MUHAMMAD KABIR (PhD) University Library, Kaduna State University, Kaduna sahabikabir@gmail.com

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EZEUDU, B. OGOCHUKWU University library Bells university of Technology, Ota Ogun state benebak@yahoo.com

#### **Abstract**

This paper describes refining of academic libraries towards digital society for sustainable development. It highlights the development of hybrid libraries as a magical solution to meet the information needs of library users in the digital society, showing great sensitivity in the use of new technologies. It also explores new trends in providing information that librarians can use to re-establish the academic library to provide effective services. Lack of efficiency, technological inefficiency and inadequate energy supplies were highlighted as some of the challenges of providing information services in digital society for sustainable development. Librarians should strive to acquire ICT skills through personal training to be relevant and defend their profession. The study identified librarians and discussed academic librarians in the digital society, as well as providing services in a digital society.

**Key words:** digital society, academic librarians in digital society, academic librarians in digital society and effective service delivery for sustainable development, challenges of providing information services in digital society and recommendations.

### Introduction

Libraries have undergone major changes in recent years. This change, caused by ICT, has affected the way information services are delivered. Traditional means of disseminating information have given way to electronic means of communication. In the development and application of ICTs in library operations, dissemination and access to information have improved and are also exempted from new roles in the provision, distribution and transmission of information. The librarian no longer plays a negative role but plays an active role. No longer a keeper of books, it is the gateway to a variety of sources of information. Haber (2011) assumes that the supply of books in recent centuries is an independent function of libraries, but that their offerings have evolved with the digital age, to meet the changing needs of their clients. Academic libraries in Nigeria are not separated from this technological revolution. As information providers, they are constantly under pressure to provide sources of information relevant to their immediate communities. People have to change the way they work and believe they work effectively in an automated environment. This means that academic libraries must integrate digital resources to be at the forefront of the provision and dissemination of information. Today, students and teachers have developed a stronger preference for electronic information than manual systems. The increasing availability of digital information has led students to find other learning and research opportunities through laptops and mobile phones. Digital technology has reduced the importance and use of libraries in developing countries.

### **Digital society**

Digital society is the age of information. It is also considered an era of explosion of sources of information. New work patterns and business practices have evolved and new skills are needed. Librarians in the digital society must be able to quickly find, evaluate and search for new information to meet the needs of their users. Librarian must communicate with others. They must be adaptable, creative and creative and able to understand things as a system or level of public image (Ramzan 2004). In the digital society, ICT has resurfaced as a library. Printed documents are no longer sufficient to store information. CDROM databases, electronic document delivery, automated cataloging, and online trading and retrieval systems (OPACs) are common. Iguavuen (2011) stated that the Internet, digitization, and access to office and research documents from remote areas caused radical changes at the end of the 20th century. Ramadan (2004) argues that developments such as expert systems, wireless networks, virtual groups, interactive Web interfaces, virtual reference services and personal web portals have brought important changes since the beginning of the new millennium.

Moghaddam (2009) believes that information technology, information systems and information networks have evolved. This century has also undergone a radical change in the user's information retrieval model. Byamugisha (2010) adds that clients' expectations for providing distance services through library services have increased. Customers now expect a variety of automated library and remote payment and withdrawal services. Nigerian university libraries are gradually changing to adapt to the information search patterns of their clients. The situation has led to the creation of digital libraries that complement traditional libraries. This is evident in trying to digitize library resources to meet the information needs of new generation users. In the digital society, libraries should be fully automated, and librarians should be involved in the design and implementation of any program that concerns them. If it is excluded, it will be difficult because any device that comes without his permission can be a serious problem for them. In addition, they should be able to develop appropriate software for their libraries, as information workers. With the availability of digital devices must be professionals capable of dealing with topical issues such as globalization, ethnic conflict, gender issues, HIV / AIDS, political unrest, war, divorce and control of births to the address, etc. HIV all this reasonable solution because of the collapse of information and equipment available, for example, librarian can prove invaluable in the battle of the frontier or in the battle of the chiefs if he can provide to the relevant authority the relevant material (Ugah, 2007).

## Academic librarians in the digital society

Academic librarians in the digital society must be aware of important changes and use their technical knowledge and intellectual mastery to maintain the leading role of academic libraries in supporting education, learning and research. This means that the academic librarian must have specialized skills that enhance the delivery of effective library services to meet the changing needs of client information. Traditional libraries revolve around sitting between books and expecting people to come and read. If they do not come, the librarian will close at the end of the day. These are daily rituals. But the modern librarian in the digital age must be strong in storing, retrieving and disseminating information through ICT. This can be done by computer, Internet, e-mail, CD, slides, teaching aids, phones, including GSM, fax machines, etc. Archives can be easily stored on CD-ROM for retrieval and distribution to potential users.

Ugah (2007) stated that Librarians can now store archives on CDs. CD-ROMs are compatible with most computers, which mean that important information can easily be stored and retrieved when needed. Information and communication tools are real in the development of cities and rural areas. Information must be accessible to all, be it scientific, technical, economic, social, institutional, administrative, legal, historical or cultural. In fact, information is only useful when it is available. This is where users can access it in the appropriate format and language. This means that the information must be communicated with appropriate means during exchanges between different users. Information specialists in the digital society may be interested in the following areas:

- Agriculture information on best agricultural practices;
- Health Health Management Information System;
- Education online learning, distance learning;
- Business e-commerce;

- Electronic governance policy;
- Political Education;
- Software development.

Ekpo (2001) points out that information is very important for individuals, families, governments and businesses. Information technologies that facilitate the professional dissemination of knowledge by librarians and other information professionals must be addressed to inform users at all times of their information needs. Some of the basic tasks of IT professionals include:

- Provide information to users;
- Help users find information;
- Facilitate dialogue between users of their services.

There is an abundance of literature on the skills and abilities needed for the librarian in the digital age. Tennant (1999) identifies important personal qualities: the ability to learn quickly and consistently, flexibility, innate risk skepticism, permanent public service vision, good interpersonal skills, and ability to facilitate and encourage change. Ability and willingness to work independently Omekwu (2003) mentions basic knowledge about computers and their capabilities, efficiency with Internet search engines. E-mail, Web browsing tools, Web browsers and Web file formats, database software, Internet development and knowledge management. Some of Krishnan's (2011) skills include communication, collaboration, creativity, innovation, critical thinking, problem solving, literacy, ICT skills, flexibility and adaptability. Above abilities are familiar to us. The challenge is to harness these skills for effective library services.

## Academic librarians in the digital society and effective service delivery for sustainable development:

Human resources are an important part of any organization. Organizational success or failure depends to a large extent on human capacity, tasks to change the librarian with the changing ICT environment. Muqaddam (2009) points out that one of the most important factors for success and momentum is specialized specialists and librarians. LaRue (2012) strongly believes that the library's most important assets are its professional staff. According to him, librarians have the ability to change lives and build a community - but to do so, they have to leave their offices, leave buildings and show the community that it is a powerful tool. Tanawade (2011) stated that it is time to make known our professionalism and the skills that must be provided. From the above, the academic library is no longer the person behind the reference desk to answer questions just a signal, but active marketing, which sells products and services offered by the library on every occasion for its community. It brings together new sources of information and provides points.

Academic librarians in the current environment are information camps, with a desperate enthusiasm to have a positive impact on their environment. He is at home with a modern technological infrastructure. While librarians continue to make a significant contribution as publishers of Ikhemuemhe (2005), we need to understand ICT infrastructure and emerging technologies to provide services to and use of clients. In the reorganization of the university library to provide effective information services, including the role of academic librarian in the digital age:

**Advocacy:** In the current exemptions, users no longer search for information in the library. The opposite is the case where the library provides information services to users. To do this, the librarian must look for ways to communicate and interact with his or her diverse users. He uses his personal skills strategies to communicate with administrators, teachers and students. During the sessions, he or she can inform the College about current publications and their accessibility requirements. As a result, he appears as a strong supporter of the library, an important body of the university (Ekpo2001).

Use of social media: The library connects people to information. Web 2.0 technologies have brought new roles to library professionals. Web 2.0 tools such as Facebook, Twitter, blogs and online groups, also known as social networks, allow people to connect online. Khan and Patti (2012) put it this way. Social media offers more opportunities to reach your community, target specific audiences, and give them the opportunity to interact with your library. By using social media, libraries can engage their clients in interesting topics and enable them to contribute, especially if they affect library services. This can improve the image of the library. Mobile Phones: Mobile devices such as mobile phones have improved communication and improved the way information is generated, accessed and retrieved. The 21st century librarian can provide efficient library services on mobile phones such as GSM (global systems for mobile communication). To support education

and research, and the use of SMS (Short Message Services) can be used to answer reference questions and make users for newcomers and upcoming events in the school calendar, such as holidays, higher education and the week of free lectures, etc. Attention has been by a device called "broadcast", where it is sent SMS immediately to all contacts of the library listed in the address book on the mobile phone. (Iwiwhu, Ruteyan & Eghwubare, 2010). The packaging of information in various forms has become the norm in the digital age. This has created new opportunities for the library to provide value-added services in the academic environment. 21st century users are at home with electronic information sources that allow multiple users to share multiple items at the same time. To take advantage of this feature, the librarian can develop and maintain the research results of his or her organization by digitizing projects, essays, and science messages. In cooperation with the University's ICT Center, an institutional directory can be set up to host these projects on the University's website. Although their presence on the site is guaranteed, their access and recovery remain the sole responsibility of the library (Ekpo2001).

**Reference Service:** The reference service is the assistance provided to the user when searching for information in the library. In Nigerian mode, many users avoid the catalog because they do not know how to use it. Some do not realize the importance of a catalog in the recovery process. Not finding the information they need can lead to frustration and apathy when using the library. The reference service is the core of libraries and should not be banned. Ibegbulam (2000) notes that reference services are no longer geared towards individual face-to-face service in the library.

The quality of the good referral service depends on the efficiency and capacity of the librarian. The librarian uses his knowledge and in-depth research strategy to meet the needs of users. It does not only refer to a row of shelves, but also involves the search process. He is not satisfied to satisfy his client. As a result, he improves his knowledge and his image of the library.

**Partnership:** Librarians in the digital environment can collaborate with academic units to provide students with literacy to become effective users of information. Ashour (2000) assumes that the development of literacy skills should be the primary focus of the library's curriculum. Information literacy is the set of skills needed to find, extract, analyze and use information. It provides students with the essential skills necessary to become independent learners throughout life. This includes the technological capabilities of using the modern library as a means of access to information. Libraries inform users and allow them to become experts. When users get the right knowledge, they can become useful citizens. In collaboration with the units concerned, the university library can establish a center of activities where users can acquire additional skills. These skills include sewing, baking, hairstyles, decorations, poultry or fish farming. This has the advantage of adding a value to the library.

**Interlibrary Loan:** According to Bushnan (2009), the role of loan librarian between the two offices has been a moving target for many years. New ways of obtaining documents forced them to rethink the workflow and tasks. The explosion of full-text sources has forced library employees to play new roles (Buchanan, 2009).

Library Guides: Library Guides are research tools that provide users with an overview of the resources that experts classify as the best in a given subject. The user can search A-Z or themes. Once the user finds proof of his subject, he is only one click away from the sources of quality of his research (Coyle, 2007). Instructional guides have been developed specifically to help users research and maximize their learning experience. In this case you will find librarians with the most important resources and tips to start your project.

**Ask Library Services:** The Internet is a reference tool as it provides access to a variety of directories, dictionaries, encyclopedias and sites from various organizations and businesses. It also offers the opportunity to provide mail users with a library service based on references by "Ask Librarian" (Dewey, 2001: 15). These services are a very common feature on library sites. Ask librarian allows site visitors to submit referral questions to a specific email address. The information librarian, to whom this task is entrusted, then answers the questions.

**Research questions and objective information services:** Another important reference service is to provide research support to library users. This service requires more time and effort than a reference library for more complex and less known problems (Kavulya, 2005). They also tend to focus on specific topics with specific

topics. For this reason, various academic libraries between public and technical information services assign responsibility to users in specific disciplines for different libraries to use (Kavulya, 2005).

**SDI Alert Services:** Selective Information Distribution (SDI) services regularly provide users with new information on the topics they choose. This type of service can increase the user's ability to cope with developments and their positive impact on efficiency and productivity (Scultz, 2006). Although IDS is often equivalent to automated search, it can be deployed in a variety of ways, both manually and electronically.

**User Training:** Dewey (2001) defines user training from the training of library users to improve their ability to independently collect and organize information, sometimes be used in tandem with bibliographic instructions, user training, library instruction, library instruction, user orientation and user training. The user training program can be implemented in different ways, for example, individually or in groups. The user training program is also a very important part of the integration service in all types of libraries.

**Skype and satellite broadcasting:** Skype is used in libraries to make group calls between companies. Library terminals that support Skype have a direct camera and a microphone that you can talk face-to-face. Although Skype is a commercial product, it is a free version with librarians, teachers and schools interested in global and more widely used educational projects (Lawson, 2011).

## The advantages of academic libraries in the digital society are:

- It provides and / or reduces the physical footprint of the library documents.
- Digital libraries can be viewed at any time, 24 hours a day, every day.
- The available office equipment is available on the user's desktop, no matter where the user actually lives.
- Allows the inclusion of documents available only on the Internet or in digital format.
- Provides the user with the ability to load text;
- Often allows multiple simultaneous users.
- Eliminates the problem that a book is missing or on the shelf. It's less laborious. And
- The digital library provides access to more extensive content in a more structured way (ease of navigation),
- d. H. We can easily move from a catalog to a specific book, then to a particular chapter, and so on.

### The disadvantages are

- Multiple interfaces each product has its own user interface.
- The copyright infringement of DRM scanning because the content thought that the author could be transferred free of charge from another without his consent.
- The user needs different passwords to remember different products.
- The range of discovery and available archives are often limited;
- It is often difficult to load or print.
- Often, there is no cost savings, especially when all products are secure virtual print products and cost hardware and software. Department of Telecommunications Rent is very high in general.
- Not everything is available in digital format.
- Access to archive files there are limitations that may vary by manufacturer, as the product may be used.
- IT Infrastructure a virtual library based on electrical and computer networks must be available.
- Not all users can spread out in front of them and use it every time and easily use books. And
- Lack of knowledge in handling the required information.

### The challenges of providing information services in the digital society are:

**Incompetence:** Some university librarians at the Nigerian University are not able to meet the challenges, especially in the provision of information services. They do not want technology and take the application of computers to make the library a real outlet. For this reason, they are reluctant to use new technologies. Tanawade (2011) states that manylibrarians lack self-reliance in the face of growing information technology. This slows the delivery of the service and delays productivity. My life and Jowkar (2008) believe that the most problematic factors that slow down the process of computer introduction, based on the lack of knowledge of librarians and users with computers and database search.

**Lack of knowledge of technology:** Some professional librarians do not have the technical expertise to serve libraries. It can include technological efficiency such as the ability to communicate responsibly with

appropriate technology, problem solving, and access, manage, integrate, evaluate training, and create information to improve learning. Learning is needed in all disciplines for the purpose of lifetime to acquire knowledge and skills in the 21 century. Edem (2008) points out that the biggest challenge facing the academic library is not spending a lot of money, but poor performance of librarians and information professionals in developing countries due to low skills in ICT.

The lack of basic skills in the use of information technology has become a bottleneck for better library services. Anira (2011) adds that librarians who do not have advanced ICT skills cannot provide effective office services, so lack of skills among librarians is a major impediment to providing services to the library in digital age.

Low Internet Connection: The Internet plays a major role in digital information, but equal access to the Internet has not yet been achieved in Nigerian university libraries. Current Internet connections to most people are slow. Olaboud (2007), notes that many constraints have led to poor Internet development in Africa, one of which is the initial investment for the installation of Internet equipment. This is because almost all African countries have large debts and are lacking currencies to buy assets. Chigbu and Dim (2012) argue that there are no efficient and energy-efficient connections that can serve as a starting point for the development of Internet services in Africa. When these services are available, the nature of expensive services is another important factor.

**Insufficient energy supply:** Nigerian energy is in a desperate state. There is no ongoing failure that prevents the effective implementation of information services. Most libraries use alternative energy sources such as power generators to function. However, these machines are prone to maintenance problems, high costs of diesel and gasoline. The resulting effect was the provision of epilepsy services. According to Edbiton (2012), energy crisis issues in the country have found expression in the spending record because most organizations spend a lot of money on alternative energy sources. These alternatives include generators, solar system, green technology, turbine gas, and others. The library as an organization is not distinct from this anomaly. Effective provision of information services may not succeed in this type of scenario.

**Low funding:** Money is the tool that connects the university library to provide effective information services. Money is needed to obtain ICT equipment, Internet subscriptions, staff training, reimbursement and maintenance. The strength of the library lies in its information resources, printed and online. Funds are needed to manage a range of services in the university library, but government support in the education sector is inadequate. Nawalu (2000), notes that problems with computer applications in African libraries include indifference and inadequate government funding. Funding is essential for excellent library services. **Expensive:** The main obstacle to digitization is that it is too expensive, especially internal scanning. An estimated from the University of Michigan in Ann Arbor, an organization for the JSTOR project, the cost of scanning based on its experience in the signal side of \$ 2 to \$ 6, assume that the supply of electronic publications to our users have certainly improved access to information, but did not save money (Anyira, 2011).

**Copyright:** It is very easy to copy, duplicate, transmit and distribute digital information. Copyright has been violated in a digital environment because it has no control over access to content and reproduction of multiple copies of digital media.

## Conclusion

The emergence of information and communication technologies has taken a leap forward for academic libraries. ICT has improved access, research and innovation. This means that it has become a very useful tool in academic libraries whose role is to support teaching, learning and research. As a result, professional librarians should benefit from the power of ICTs to ensure that university libraries are reorganized to be ICT-compatible and remain the center of provision, production and dissemination of ICT information. Information specialists must be well informed about new inventions in the field of ICT. This profession leads a number of people from different fields such as engineering, telecommunications, computers, electronics and other fields. Librarians can partner with other professionals to develop new technologies. Libraries need more than ever to become more important in the digital society.

### It's recommended that:

- Training of academic librarians should be a priority. This is because the success or failure of the library service depends on the staff.
- Resources for staff training and development should not be manipulated at universities and should be disclosed as needed. Experience has shown that training staff are sometimes absent due to insufficient funds.

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