

**Provision of Online Information Services in Nigerian Academic Libraries.**

**By**

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**Abstract**

The digital age has brought about a completely different way of providing library services resulting to the development of new services. Qualitative research method was used in this study to examine the online services Nigerian academic libraries provide to their patrons. A purposive sampling technique was used to collect data from ten academic universities through an online survey and analyzed using percentage. The study revealed that the shortage of web technologies skilled librarians, poor information technology infrastructure and high cost of equipment has hindered the Nigerian academic libraries from providing online information services. This study also highlights the advantages of online information services and assist Nigerian academic libraries provide better online library services to the growing online patrons.

## **Introduction**

The online environment particularly the World Wide Web has an unstructured environment and the advancement in technology has made it possible for anyone with the necessary technology and skills to post anything on the Internet without independent review and evaluation resulting to unreliable information on the Internet. The result is an exponential increase in electronic documents with a dynamic nature. Wurnman (1989) stated that

*“several studies have found that somewhere between 60 and 80 percent of people searching for information on the web failed to find what they were looking for”.*

This clearly reveals the much needed role of the library and information professional in the digital age. Traditionally, librarians select the materials for their collections using criteria that help establish the authority and accuracy of the material. In an online environment, it is often difficult to establish reliability and authority of information. This substantially increases the chance that patrons may access incorrect information. To address these issues librarians have begun to establishing their presence online to guide their patron. Librarians and information professionals are responsible for creating innovative information systems for the collection, organization, dissemination and preservation of information and new knowledge regardless of format.

Apart from automating their collections and adding computers which students could use to search catalogue, online databases and the Internet, librarians have the responsibility of enhancing the value of existing information resources by customizing and transporting their services to the online environment. Dahl M, Banerjee K and Spalti M. (2006), asserts that libraries that cling to traditional service models in an era of new information technology, rising

costs and flat budget cannot thrive. Transporting library services to the online environment will involve designing and maintaining a library website as a platform for delivering online services. .

### **Purpose of the Study**

Deregulation of the telecommunications industry and implementation of the information technology policies by the Federal Government of Nigeria, has resulted in the proliferation of Internet cafes, giving birth to a generation of internet-savvy library patrons who regard the Internet as a primary source of information. These online patrons are overwhelmed by information overload on the Internet and are crying for help to find reliable and accurate information quickly. The purpose of this study is to determine the online information services academic libraries in Nigeria provide its patron, and highlight the importance of transporting their services to the online environment. This study will also identify some of the challenges academic libraries in Nigeria are facing in providing its patrons with online information services.

### **Significance of the study**

The study revealed extend to which academic libraries in Nigeria provide online services to the growing Internet savvy patrons. Its finding also revealed some of the challenges that need to be addressed for effective online information services in academic libraries.

### **Research Methodology**

Selection of respondents and university libraries was purposive and criterion based. An online questionnaire was designed and the URL posted in the Nigerian Library Association forum which comprise of different types of libraries. Nineteen (19) universities who had a website were purposively selected as the population of the study. The sampled population comprised only ten (10) universities, which had a webpage/website dedicated for their libraries. The library web site is considered as the expansion of traditional library services on the internet.

The data collected from the sampled population were analyzed to determine if they provide online reference services, online library instructions and library portal that point patrons to selected electronic resources. The factors hindering effective online information services were also examined. The researcher also examined each website of the 10 university libraries for detail analysis.

The online questionnaire was designed using SurveyMonkey ([www.surveymonkey.com](http://www.surveymonkey.com)), an intelligent survey software that enables anyone to create professional online surveys with features for analyzing data collected. The online questionnaire was made available and data collected over a period of one month from 2<sup>nd</sup> September to September 25<sup>th</sup> 2006. The sampled websites were also examined during this period and might have changed their design at the time of publication of this paper.

Table 1: Sampled population.

S/N	Name of Institution	URL
1	University of Lagos	<a href="http://www.unilag.edu/library.htm">http://www.unilag.edu/library.htm</a>
2.	Obafemi Awolowo University, Ife	<a href="http://www.library.oauife.edu.ng">www.library.oauife.edu.ng</a>
3.	University of Ibadan, Ibadan	<a href="http://www.ui.edu.ng/unitslibrary.htm">http://www.ui.edu.ng/unitslibrary.htm</a>
4.	University of Ilorin, Ilorin	<a href="http://www.unilorin.edu.ng">http://www.unilorin.edu.ng</a>
5.	Federal University of Akure, Akure	<a href="http://www.futa.edu.ng/Library.htm">http://www.futa.edu.ng/Library.htm</a>
6.	University of Benin, Benin.	<a href="http://www.uniben.edu/library/oxford_journals.htm">http://www.uniben.edu/library/oxford_journals.htm</a>
7.	Usmanu Danfodiyo University, Sokoto	<a href="http://www.udusok.edu.ng/">http://www.udusok.edu.ng/</a>
8.	University Of Nigeria Nsukka	<a href="http://www.unn-edu.net/library_services.html">http://www.unn-edu.net/library_services.html</a>
9	University of Jos	<a href="http://www.unijos.edu.ng/Lib/index.htm#">http://www.unijos.edu.ng/Lib/index.htm#</a>
10	University of Port Harcourt	<a href="http://www.uniport.edu.ng/index.php?option=com_content&amp;task=view&amp;id=111&amp;Itemid=189">http://www.uniport.edu.ng/index.php?option=com_content&amp;task=view&amp;id=111&amp;Itemid=189</a>

## **Overview**

Digital resources and networking creates new opportunities for the organization of library services that broke through the time and place limitation of print materials. Librarians have always acted as a mediator between the source mind and client mind, but the digital age has enabled people to have access to information they could not readily get before, this has lead many to question the mediating role of the librarian. The implication is that for librarians to be relevant in the digital age they will have to move their service to the online environment.

Kaufman (2001), acknowledged that digital resources have brought about some radical changes within the library's organizational structure and in the ways libraries provide information and services. She concluded that libraries as a place will continue and their central role in the 21st century will not be diminished because of digital resources. Instead, she expects the 21<sup>st</sup> century library users will have more information available to them and will be better served. She also stated that the web would not produce the totality of information that the users need and will not provide access to what it does not have easily and will be unable to separate the virtual wheat from the chaff.

The digital age has redefined the way librarians provide their service; Aderson (1996), identified the emerging roles of a librarian in a digital environment to include;

- Selecting electronic resources and evaluating their quality.
- Developing expeditious and effective locator tools to make the complex web of resources more readily accessible to both sophisticated and naïve users.
- Bring value-added components and indexing to the morass of resources, which will continue to proliferate since anyone can now, in effect, publish on the web.

- Delivering information services where librarians are not merely the passive catalysts who direct inquiries to relevant sources, but provide the information that users actually seek – analyzed, evaluated, synthesized and transferred in its most useful form.
- Teaching novices how to find resources, libraries can also teach specialists how to locate relevant resources outside their own disciplines and even within their own fields.
- Teaching critical evaluation skills, which include assessing the authenticity and quality of what is found and determine whether an identified document is worth downloading.
- Functioning as a bridge between system designers and users, by having sufficient credibility with programmers and by understanding users' needs, librarians can server as the user's advocate with the system designer while also interpreting to the user what may or may not be technically feasible.

Covi and Cragin (2004), asserts that students and faculty increasingly demand and prefer access to electronic sources delivery system, and to networked information. This is a clear indication that to meet the information needs of the academic community, academic libraries must provide online information services.

Nigeria has recorded a massive improvement in the telecommunication industry over the past few years. The Nigerian Communications Commission's regulatory efforts have led to increased competition and availability of a wide range of voice, data and Internet applications and services. Esselaar and Stavrou (2003)[6] identified that the reforms in telecommunication industry by the Nigerian Communications Commission resulted in the liberalization and deregulation of the industry in 2000. The impact of this resulted in 3,900% growth in Internet use between 2000 and 2007 as revealed by Internet Usage Statistics

([www.internetworldstats.com/stats1.html](http://www.internetworldstats.com/stats1.html) ). More and more Nigerians are now relying on the web for information.

### **Library Web sites/Portals**

The explosive growth of the Web has made it more difficult for any individual site to be seen, or for any individual patron to make sense of it. The shift now is from not being able to get enough information to not being able to identify and retrieve reliable and accurate information from the volumes of information available in digital form. As patrons continue to make greater use of the Internet, librarians now use web sites/portals as a means to facilitate access to specific Internet and other digital resources. Zhou (2003), defined a web portal as a doorway that can be customized by individual users to automatically filter information from the web. Similarly, Lakos (2004) defined portals as “a customized learning and transactional Web environment, designed purposefully to enable an individual end-user to 'personalize' the content and look of the website for his/her own individual preference”. O’Leary (2000) notes that academic library are by far the most prolific creators of library portals, both general and in dozens of specific areas of library practices. A research team at LISU at Loughborough University noted the benefits of a library portal to include:

- providing a single point of access to library resources
- allowing teaching staff to direct students to useful resources more easily
- promoting the resources held by the library, including subscription
- improving navigation of library resources
- improving access to scholarly and educational web based resources
- providing more efficient access to e-resources
- improving service delivery

As primary gateways for information, academic libraries should offer high-quality vetted Internet search engine links, Open Access databases and journals, user guides/helpsheets, and Information Literacy instructions on their websites.

### **Reference services**

Traditionally, human intermediation occurs in a face-to-face mode where users express their information problems (or what they know about them) to intermediaries. Jane and McMillan (2003) noted that there is evidence, both anecdotal and recorded, that increasing numbers of people are turning to the Internet as their preferred source of information, and this is being reflected in library reference desk statistics. Coffman (2004)[13], states that between 1997 and 2003, median ARL reference statistics dropped from a 1997 peak of 162,336 to a 2003 low of 96,228 a loss of over 40 percent in the span of 6 years. In response to the shift to virtual inquiry, librarians had to repackage and customize their reference services in line with virtual inquiry. Online reference methods began with simple communication exchanges, such as online information request forms on the Web and e-mail. These enabled students to ask questions from their computers but did not provide the immediacy of reply, or allow reference interview techniques to be employed easily. Coffman (2004), notes that by the late 1990s, it had become apparent to many that if librarians were ever to successfully move their reference service to the web, they will need something live, interactive and real time. Something that allowed reference librarian to work with patrons to help them find the information they wanted right when they sought it and not days later in an e-mail. This has resulted to the use of reference application like Web contact Center software, to provide on-line chat where patrons can get an instant response from the reference Librarian and enable users and librarians to look at and work with the same on-line source simultaneously.

### **Online Information Literacy Instructions**

Helping patrons use library resources more effectively through directed and structured instructional activities is one of the core services that libraries have traditionally offered users. Wright A.C (2004), asserts that librarians have a significant responsibility for information literacy instruction, specifically for the selection, use, and evaluation of multiple information resources, including Internet resources. The Internet has resulted to a great need for instructions in research skills at time and places convenient to students. Since information access now takes place anywhere, users expect that instruction will be available anywhere as well. Dewald (1999), noted that libraries often cannot afford to hire more librarians, yet the need for information instruction is greater than ever. Academic libraries are beginning to meet these challenges by repackaging and customizing bibliographic and other relevant library instructions into on line tutorials that provides students with options of time and place for instruction. However, Dewald (1999), concluded that web-based library tutorials are best used to supplement and complement classroom instructions rather than in isolation.

### **Findings and Discussions**

The responses collected from the sampled libraries through the online questionnaire were used to generate data, analyzed using frequency tables and percentages. The findings and discussions are presented bellow.

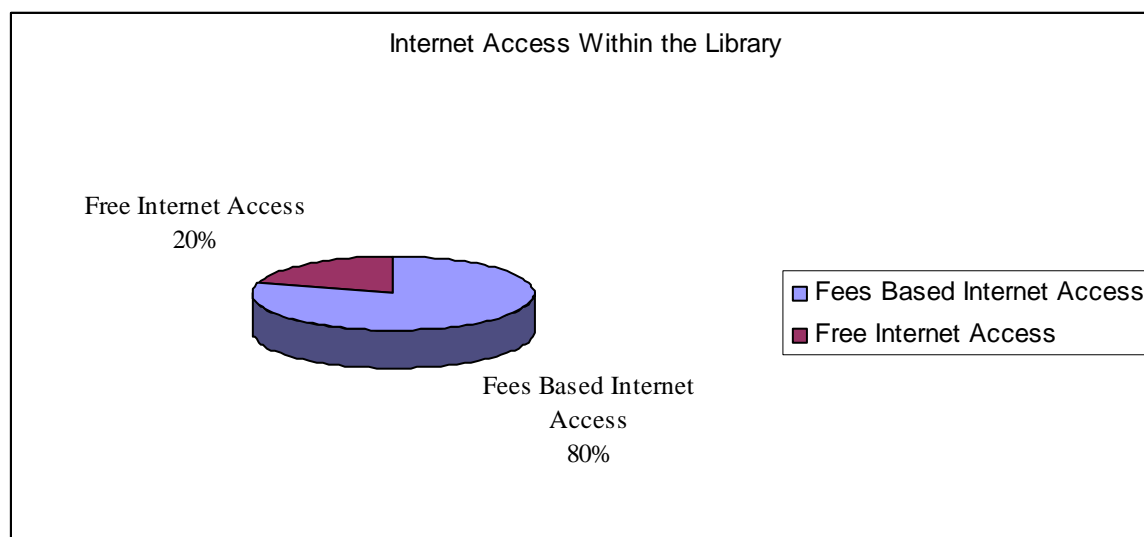
#### **Internet Access.**

The provision of Internet access within the library is a major factor in the provision of online services. All the sampled population indicated they provide their patrons with Internet Access within the library. However 80% of the sampled population indicated that they provide

Internet Access at a fee while the remaining 20% indicated they provide free access to Internet. Fees based Internet access is most likely to limit the number of users, since many students will be unable to afford to pay.

**Table 2: Internet Access within the Library.**

Internet Access	No of Libraries	Percentage (n=10)
Fees Based Internet Access	8	80%
Free Internet Access	2	20%



**On-line Library Services Provided by the Sampled Libraries.**

The last few years has seen the proliferation of Internet access both within and outside the University campus. As indicated in table 2 above all the sampled population for this study indicated they provide their patrons with Internet access. The provision of Internet services within the library is just a step in providing on-line information services. The researcher sought to know the library services they provide their patrons via their websites see table 3 below. Asked if they provide their patrons access to electronic resources outside their libraries and 20%

answered in affirmative. Similarly same percentage (20%) indicated that they provide their patrons with access to digital resources such as electronic theses and dissertation within the library. Even though all the sample population pay for database subscription through the Nigerian Universities Library Consortium on 20% indicated the facilitate access to their databases via their website.

**Table 3:** On-line services provided by the Sampled Libraries.

S/No	Type of services	No of Libraries	Percentage (n=10)
1	Access to resources outside the Library	2	20%
2.	Access to digital resources within the library	2	20%
8.	Electronic theses and dissertation	2	20%
9.	Subscribed online Database	2	20%

The study revealed that non of the sampled libraries provide any of the following services; online information literacy instructions, online course reserve, online reference services, remote access to online catalogue, weblog, online document delivery.

As academic libraries continue to make their presence online and provide Internet access within the library, it is also important that they make some of their services available online and accessible remotely to meet the growing population of online patrons. As Nigeria Academic Libraries make their presence online there is the need to make Information literacy skills available online. Online Information literacy instructions can be in the form on help sheets on how to use a particular database, library catalogue, aggregated vendor resources and other print and non print resources. Online information literacy instructions will go a long way to augment

the face to face library instructions and also alleviate the shortage of Information literacy skills instructional librarians.

Similarly, with the growing number of Internet users with free e-mail accounts and the availability of free web base Instant Messaging software, online references services is a technology that academic librarians can exploit without spending money on proprietary software.

### **Factors Affecting the Provision of Library Services Online.**

The researcher sought to know the factors hindering the provision online information by the sampled libraries. The responses collected in table 4 and discussed bellow:

Table 4: Factors hindering effective online information services.

S/No	Factors	No of Libraries	Percentage (n=10)
1	Lack of web technology skilled staff	9	90%
2	Lack of Funds	7	70%
3	Lack of Basic Information infrastructures(Internet access, Electricity, and web server )	8	80%
4	Limits of network bandwidth and slow transmission	8	80%

Lack of web technological skilled personnel is indicated by 90% of the respondents as a major factor to the inability of the sampled libraries to implement online information services. Limits of network bandwidth and slow transmission speed, as well as lack of basic information infrastructures are considered by 80% of the respondents as some of the problems hindering the delivery of online service. Lack of funds is indicated by 60% of the respondents as a problem in the provision of library online information services.

The researcher sought to know if the Library website was designed, developed and maintained by staff of the library. The response by the respondents revealed that 90% of the sampled websites were designed, developed and maintained by people outside the library. An analysis of these websites indicates that they were designed and developed by a non-Information professional.

### **Implication for Nigerian Academic Librarians**

A good and effective library portal/web page should not just contain general information about the collections and staffing of the library. The web page should be use to facilitate access to web based resources and services. Borgman L.C. (1997), asserts that to maintain quality services, libraries must offer access to resources held elsewhere. The Internet has resulted in a revolution in scholarly publication, it provide remote access to quality vetted free electronic resources and Open Access journals which are scholarly peer-reviewed. Academic libraries in Nigeria should use their web pages to point their patrons to these resources in meeting the demands of their online patrons.

The implication of transporting library services to the online environment for the Nigerian academic librarian in the digital age is enormous particularly with the dynamic nature of digital technology which is constantly creating the need for new skills, work environment and work methods. Tennant (2003), states that to be effective, librarians and Information professionals must constantly learn and retool. To deliver digital library collections and services today, the web must be used. Thus, the information professional must be well-verse in web technology, which may mean everything from HTML codes to web script programming.

The online services discussed in this article can be deployed using free Internet software and open source software hence does not require any financial investment in software. Academic librarians should take advantage of the free software like trillion available at [www.trillian.com](http://www.trillian.com) for online reference services, open source software like MyLibrary and open source website design software applications like PHP and MSQL to design static and interactive online library instructions and web portals/webpages.

### **Conclusion.**

The demand for desktop access to electronic resources by the academic community demands that Nigerian academic libraries provide their services and resources online and remotely. The cost of enabling technology, equipment and Information policies of the Federal Government of Nigeria have resulted in an Internet culture among staff and students of the Nigerian Universities. Already many academic libraries provide Internet access, and some have uploaded their websites on the Internet. However, they are yet to move their services online and provide remote access to digital resources. The lack of web technological skilled librarians, lack of funds, and lack of basic information infrastructure has been identified as some of the factors militating against libraries providing online information services. Library schools must review their curriculum to reflect the need in the work field and also heads of libraries must invest in the retraining of their staff, by providing sponsorships to attend workshops, and conferences organized by their professional bodies.

Academic libraries must make use of their websites or portals to point their patrons to the right electronic resources. The use of open source, open access databases and journals, and free web based resources will go along way to address some of the financial challenges in the implementation and delivery of online services.

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