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# AVAILABILITY AND ACCESSIBILITY OF WEB-OPAC OF UNIVERSITY LIBRARIES IN NIGERIA

Asubiojo Bukky Olufemi<sup>1</sup> & Oluwatobi M. Fabunmi<sup>2</sup>

<sup>1</sup>University Librarian, Obafemi Awolowo University, Ile Ife, Nigeria.

Email : femibuk@yahoo.co.uk

<sup>2</sup>Cataloguer, Obafemi Awolowo University, Ile-Ife, Nigeria.

Email: bummyfabuns@gmail.com

## ABSTRACT

*Explored the availability and accessibility of web-based OPAC in Nigerian university libraries. An Internet survey checklist targeted at all the 124 university libraries in Nigeria was developed and used. Libraries that could not be located on the Internet were excluded from the study which leaves 64 university libraries to be used for the study. The study revealed that 48.5% of Nigerian university libraries could not be located on the Internet because there was no link to them on their university websites. Findings further indicated that 25.3% were not directly hyperlinked on their university websites. The result also showed that only 29.7% of the Nigerian university libraries have website while only 10.9% provided web-based OPAC to distant and remote users. Result also showed that only 9.4% of the available web-based OPAC were accessible. Hence, the study concluded that the majority of university libraries in Nigeria were lacking behind in the provision of flexible services which focus on individualized and distant contacts with their clientele. Therefore, the study recommended direct hyperlink to the university libraries on their parent institution websites; development of websites through which the libraries can disseminate information about their resources and services to information seekers on the Internet and suggested provision of web-based OPAC to be one of the criteria for assessing a university library services by the National University Commission.*

**KEYWORDS :** Web-based OPAC, Library Website, Library Links, Library Users

## Introduction

University libraries are the nucleus of knowledge and information services of their parent

institutions. They disseminate information about their collections and services they offer. Most university libraries in advanced countries provide services to information seekers without their physical presence in the libraries. One of the services they offer is a Web-based Online Public Access Catalogue (OPAC) which is an important service any university library can offer to its clientele. Accessibility to Web-based OPAC is an important service for information searchers to fulfil their bibliographical information needs. Therefore, information seekers who choose not to travel to the library or to know ahead of time what the library holdings are on the topic of his or her interests could be served. However, it has been observed that most university libraries in Nigeria have not been providing web-based access to their collections and services. Meanwhile, Hughes asserted that the premise that patrons will be available in-house to access and use the library catalogue is fast becoming a fallacy that university libraries can no longer ignore (Hughes, 2001). It is against this backdrop that the researchers investigated the availability and accessibility of Web-based OPAC of university libraries in Nigeria.

The use of information and communication technologies has accelerated the rate at which library patrons can access information resources and services. Arkorful (2007) asserts that at the touch of the button, one can have access to huge amount of information regardless of one's location, the location of the items and their formats. This is to say that a library user can be within the library or away and still use information resources available in his or her local library and other libraries of the world. Fatoki (2011) corroborates this when she states that the Internet has expanded the concept of OPAC which has enhanced search capabilities and is accessible from any computer connected to the internet. This implies that university libraries that make their OPAC available on the Internet increases access to their collections. This type of OPAC is what is referred to as Web-based OPAC.

A Web-based OPAC is a database of bibliographic records of information resources of a library or group of libraries which is available and accessible through the Internet that anybody can access from anywhere at any time. It is programmed to facilitate members' access to the OPAC through their own search, for the ease of borrowing, instead of searching through the card catalogue. In addition, members can also request for the information about borrowing, reservation, etc. related to their own library profile, as well as to make automatic reservations (Husain & Ansari, 2006). This means that information seekers can explore and use library resources by connecting to Uniform Resource Locators (URLs) of the university libraries OPAC anytime and from anywhere in the world. Thus, the provision of Web-based OPAC may enhance patron's information literacy skills through construction of search strategies in an online environment.

Access to information resources can stimulate change and foster enabling environment for meaningful and responsive learning. Saeed (1999) study showed that out of 29 university libraries in Pakistan, only two have a Web-based OPAC. This implies that majority of university libraries in

Pakistan offer services that are not in compliance with 21<sup>st</sup> century generation of information seekers although the study was carried out over a decade. However, Rao and Babu (2001) claimed that an increasing number of libraries are building home pages on the Internet from where users have access to a variety of services without physically entering a library. They asserted that the catalogues of many leading libraries are available on the Internet which provides platforms for independent and easy browsing. This is to say that a Web-based OPAC can eliminate the need for library users to visit the library building since their information needs can be satisfied by the library through the Internet. On the other hand, Muller and Chandrashekara (2009) discovered that out of 1,338 respondents only 10.44% access library OPAC on the Internet. Several factors may be responsible for the low accessibility via the Internet which may range from unavailability to lack of awareness since Web-OPAC is convenient and information seekers favour convenience when choosing among electronic information sources.

Waller (2010) reports that the remote access to the library OPAC has increased markedly, possibly as more members of the public become aware that they can access the catalogue remotely at any time from any place. Waller study showed that 42.6% of her respondents access the library OPAC outside the library. This is to say that out of 1,000 library users, about 420 users access the OPAC remotely. Although, the same study also showed that 33.6% of the respondents who access the OPAC outside the library spent less than one minute on the catalogue. These categories of users may just want to see what the library holds on a particular topic, or they may want to obtain a physical copy of a specific book and these may account for the less time spent.

Akhigbe, et al (2010) asserts that searching and reservation of books online is one of the important facilities that any library can offer to their patrons. Online books and journal searching assist library users to make effective use of their time, because they do not go to the library in person. They can use their laptops anywhere there is an internet access point, with these facilities, the information seekers can find a number of books they need. Nonetheless, Akhigbe and others compared online searching of library catalogue and reservation of books by university students in the United Kingdom (UK) and Nigeria and found out that all students in the UK have access to OPAC on the Web, while no student in Nigerian universities has access. Their study equally showed that all students in the UK universities have borrowed and renewed books online without entering the library while none of the Nigerian student has used the facility. Although library facilities that are available in the advanced countries cannot be compared with what is obtainable in the developing nations particularly in Nigeria. Furthermore, Akhigbe et al (2010) collected data for their study from Nigerian universities in 2006 and that of UK universities in 2007. A year difference may mean a lot in the dynamic world of information communication and technologies.

Moreover, Bamigboye and Agboola (2011) found out that 83.3% of their respondents agreed that

OPAC is available mainly in the library; 73.4% agreed that it is available on the campus network while 60.0% claim that OPAC is available on the Internet. This implies that a very large proportion of their respondents have not been accessing their university library collections outside the library buildings. Also, there is no indication that the university libraries of the respondents operate web-based OPAC which one can use to validate the claims of those who agreed that the OPAC is available on the Internet. In addition, the study does not show that any of the respondents use library catalogues in their hall of residence or office at any point of time.

Whereas, study such as Waller (2010) reveals that majority of the library users access library catalogues anywhere and at any time, other studies conducted in developing countries and particularly in Nigeria showed that the majority of the library users do not access library catalogues outside the library premises. Local studies such as Akhigbe, et al (2010) and Bamgboye and Agboola (2011) did not beam their search lights on the presence of university libraries on the Web or hyperlink to the libraries on their parent institutions' websites nor availability and accessibility of Web-based OPAC on Nigerian university libraries. To this end, our study aims to:

1. Investigate the occurrence of direct hyperlink to Nigerian university libraries on their universities' websites;
2. Find out the availability of websites of Nigerian university libraries;
3. Determine the availability of Web-based OPAC of Nigerian university libraries; and
4. Examine the accessibility of Web-based OPAC of Nigerian university libraries.

### **Methodology of the Study**

#### **Research Design**

This study adopted online survey method. This method was considered most appropriate due to the large size of the population sample and researchers did not have direct access to the sampled university libraries.

#### **Population of the Study**

The study population consisted of all the federal, state and private university libraries in Nigeria. According to the National University Commission (NUC) Monday Bulletin (2012) and the statistics available at <http://www.nuc.edu.ng/pages/universities.asp>, there are 124 university in Nigeria. Specifically; there are 37 federal, 37 state and 50 private universities with a library attached to each of them.

#### **Selection of Institutions**

Researchers selected and used only university institutions of which their Uniform Resource Locators

(URLs) were available at <http://www.nuc.edu.ng/pages/universities.asp> NUC Website and those which could be located through Google search engine. The reason for using Google search engine was because some universities URLs were not available on the NUC website while some website addresses have changed. Thereafter, a list of URLs of universities was prepared, visited and examined. All the websites were available in English.

### Sampling Technique

The researchers adopted purposive sampling method to select university libraries with hyperlinks on their parent institutions' websites. Hence, only university websites with hyperlinks to their libraries were used for the study while those with no link to libraries were excluded. Therefore, the total number of university libraries used for the study was 64, that is, 24 federal, 17 state and 23 private university libraries as illustrated in Tables 1A, 1B and 1C.

**Table 1 A: Federal University Libraries**

Names	Year of Estd.
Kenneth Dike Library, Ibadan	1948
Nnamdi Azikiwe Library, Nsukka	1960
Kashim Ibrahim Library, Zaria	1962
Hezekiah Oluwasanmi Library, Ile-Ife	1962
University of Lagos Library	1962
John Harris Library, Benin City	1970
University of Calabar Library	1975
University of Jos Library	1975
Ramat Library, Maiduguri	1975
University of Ilorin Library	1976
Donald Ekong Library, Port-Harcourt	1976
AbdullahiFodiyo Library, Sokoto	1977
AbubakarTafawaBalewa University Library, Bauchi	1981
Federal University of Technology Library, Owerri	1981
ModibboAdama University of Technology, Yola	1981
Federal University of Technology Library, Akure	1982
Federal University of Technology Library, Minna	1983
University of Abuja Library, Gwagwalada	1988
'NimbeAdedipe Library, Abeokuta	1988
Francis Idachaba Library, Makurdi	1988
University of Uyo Library	1991
Michael Okpara University of Agriculture Library, Umudike	1992
National Open University of Nigeria	2002
Federal University Dutse Library	2011

**Table 1B: Private University Libraries**

<b>Names</b>	<b>Year of Estd.</b>
Babcock University Library	1999
Igbinedon University Library	1999
Madonna University Library	1999
Bowen University Library	2001
Benson Idahosa University Library	2002
Covenant University Library	2002
American University of Nigeria Library	2003
AjayiCrowther University Library	2005
Bells University of Technology Library	2005
Bingham University Library	2005
Seliat Adebutu Library	2005
Lead City University Library	2005
Novena University Library	2005
Redeemer's University Library	2005
Joseph Ayo Babalola University Library	2006
Achievers University Library	2007
African University of Science and Technology Library	2007
Caleb University Library	2007
Obong University Library	2007
Wesley University of Science and Technology Library	2007
Afe Babalola University Library	2009
Paul University Library	2009
Salem University Library	2009

### **Data Collection**

A checklist was designed and used for data collection. There are various examples of checklists that have been designed to evaluate Internet resources, but there are only a few regarding university library Web sites. In fact, there are no commonly accepted standards or even sets of criteria for evaluating such Web sites (Chao, 2002). Hence, researchers prepared and used a checklist which contain name of the university library; type of the university library (i.e. whether federal, state or

private); occurrence of hyperlink to the university library on the university website; availability of university library websites; availability of university Web-based OPAC and accessibility of Web-based OPAC.

Researchers visited each of the 64 university institutions' websites with hyperlinks to their libraries. Thereafter, researchers navigated from university websites to the library website or webpage as the case may be. At the library homepage, researchers looked at links to ascertain availability of library catalogue. If it is available, OPAC search option was used to determine the accessibility of the library web-based OPAC to users outside the library wall. The name of a renowned author in the field of humanity was used as access point. It was discovered that majority of the university libraries with web-based OPAC have Professor Wole Soyinka works in their collections.

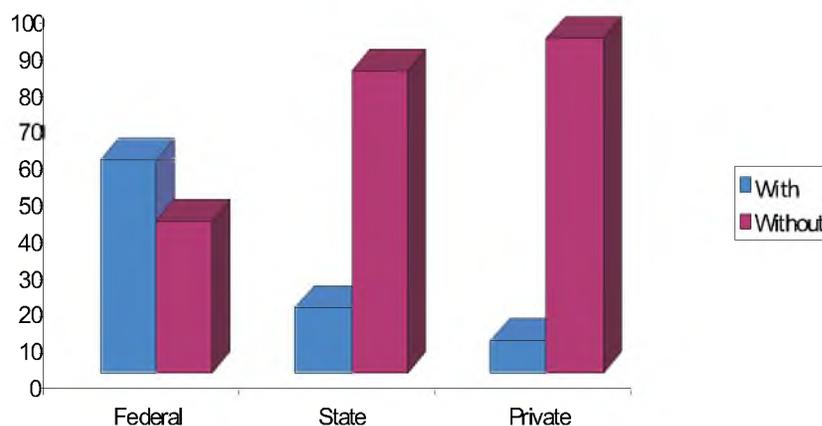
Data collected was analysed using frequencies, percentages and cross tabulation. Frequencies and percentages were used to describe university libraries with hyperlink on their parent institution websites and/or library webpages. While cross tabulation was used to measure type of university libraries with availability and accessibility of Web-based OPAC.

### Results and Findings of the Study

Out of 64 university libraries that have links on their university websites; only 70.8% of federal; 82.4% of state and 73.9% of private university libraries have direct link. About 25.0% of university libraries have link under services, useful links, support services, relevant links and academic support. Figure 1 shows that only 58.3% of the federal, 17.6% of the state and 8.7% of the private university libraries have websites. About 70.3% of 64 university libraries have only a web page containing few paragraphs and few words of information.



Figure 1: University Libraries Links



**Figure 2: University Libraries with and without Websites**

**Availability and Accessibility of Web-based OPAC**

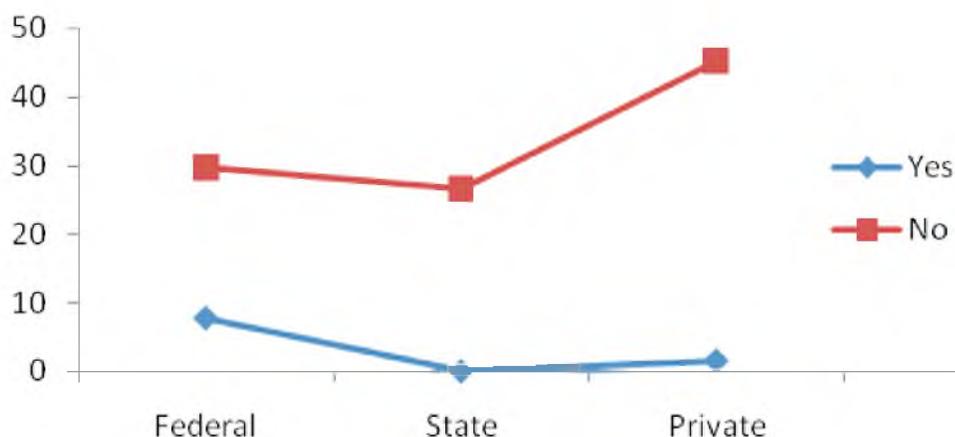
The researchers examined the library website to ascertain the availability of university libraries web-based OPAC. Table 2 presents the result.

**Table 2: Availability of Web-based OPAC**

Web - based OPAC	Federal University Libraries N = 24	State University Libraries N = 17	Private University Libraries N = 23
Yes	20.7%	5.9%	4.2%
No	79.2%	94.1%	95.7%
Total	100%	100%	100%

Table 2 shows that 79.2% of the 24 federal, 94.1% of 17 state and 95.7% of private university libraries did not have web-based OPAC. In all, 89.1% of the university libraries in Nigeria did not have web-based OPAC.

To ascertain the accessibility of the available web-based OPAC in Nigerian university libraries, the researchers carried out a simple search for the work of renowned author in Nigeria, Professor Wole Soyinka to determine the accessibility of the available web-OPAC to remote users. Figure 2 shows that 29.68% of federal; 26.56% of state and 45.36% private university libraries with web-based OPAC were not accessible to remote users.



**Figure 3: Web-OPAC Accessibility**

### Findings and Discussion

Findings from this study revealed that 48.4% of the university libraries in Nigeria have no link to the library pages on their parent institution websites. By implication, users, friends and visitors of those libraries would not have a clue of what the libraries can offer in terms of facilities, resources and services unless they go to the library in person. Furthermore, findings shows that 25% of university libraries in Nigeria did not have a direct hyperlink on their university websites. Instead they were sub-linked under menu that a user who could not put in extra efforts in searching for the library on their respective university website would miss out. This might discourage library users from visiting library websites or web pages. This lapse can prevent information seekers from being aware of the resources and services offered by the library particularly those whose time schedule would not allow them to be physically present at the library.

As regards library websites, it was only 29.7% of university libraries have websites. This implies that most of the Nigerian university libraries have not maximized the exposure of their resources using information technologies since library website is one of the important tools to showcase library resources and services. Thus, how would the libraries showcase their resources and service to the global information community without library websites? Moreover, libraries with a webpage which contains few paragraphs and little information portray the type of attitudes they have towards meeting the information needs of their patrons in this Internet age.

Similarly, only 10.9% of the university libraries in Nigeria have web-based OPAC. This is to say that majority of the library users which are mostly students, lecturers, researchers and administrators could not access library collections without physically going to the library. This brings to mind the fourth law of library services which says that libraries have to save the time of its users. This suggest that 89.1% of Nigerian university libraries were not satisfying the bibliographic information needs of their clientele who would like to search library collections virtually before making a trip to the

library. Moreover, library users who would like to make use of their handheld mobile computing devices such as PDAs and web-enabled cell phones to search library OPAC would be disappointed. The findings revealed that majority of the private, state and federal universities do not have their resources available on the web. Hence, this study corroborated Saeed (1999) findings which show that only two out of 29 university libraries in Pakistan have web-based OPAC.

In terms of the accessibility of Nigerian university libraries web-based OPAC, it was only 9.4% of them that were accessible to distant users. The implication of this finding is that most of the library users would not see the relevance of library services in this era of Internet. It is clear that most of the federal and state universities run distant learning programmes, how could a library without an accessible library web-based OPAC effectively play its roles in supporting and disseminating information to distant learning and remote users? Invariably, distant learning students, researchers and lecturers would turn to other sources that are readily available irrespective of the cost or worst still the intellectual stuff.

### **Conclusion**

Web-based OPAC availability is one of the resources that enable university libraries to extend their services to the wider audience. It plays an important role in enhancing access to resources and services of the libraries. This study shows that a significant number of university libraries in Nigeria were not hyperlinked on their parent institution websites. The patrons of about 48.4% university libraries would not be able to access library collections in their university without travelling to the library personally. Hence a good number of university libraries in Nigeria have not been using the information technology to show case their services and resources beyond their immediate community.

Moreover, Most of them did not have websites while majority of them did not provide web-based OPAC services. Library users need web-based OPAC services to fulfil their bibliographic information needs particularly those ones who choose to access library resources from their hall of residence, homes or offices. Therefore, university libraries in Nigeria were lacking behind in the provision of flexible services which focus on individualized and distant contacts with their clientele.

### **Recommendation**

To answer new demands, it is imperative that the university libraries of the 21st century move their services and resources to the Web front. Hence, the researchers make the following recommendations:

- University librarians should ensure that the Nigerian university libraries have direct link on their parent institution websites.
- University libraries should develop websites through which they can disseminate full information about their resources and services to information seekers on the Internet.
- Librarians and libraries should fast track their efforts in creating functional and effective web-based OPAC by automating their catalogues and implementing circulation modules with link to the Internet.
- University libraries web-based OPAC services should be accessible without any restriction.

- Availability and accessibility of web-based OPAC can be one of the criteria for assessing university library effectiveness by National University Commission.
- Librarians and libraries in Nigerian universities must redefine their roles to stay relevant in the new landscape of information services.

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