Availability and Usability of Academic Library Websites by Undergraduates in Federal Universities in South East Nigeria

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ABSTRACT

The study investigated availability and usability of academic library websites. Descriptive survey design was adopted for the study. The sample size consisted of 392 registered undergraduate library user determined from YaroYamene formula. Instrument used for data collection were checklist and questionnaire. Data obtained were analysed using percentages and mean ratings. Findings of the study indicated that federal universities in South East Nigeria, have library websites for their various libraries. They have websites with Universal Resource Locators (URLs) specifically for the libraries; while the librarians have links on the university main website; the students found out about library websites through their friends followed by the library workstation, then library staff members. The result also showed that in the last six months, the users have approximately visited the library website on a weekly basis. The study recommended among others that libraries should start paying more attention to their websites as today's users are increasingly living their lives online.

Keywords: Academic Library, Websites, Library Websites, Availability of Library Website, Usability of Library Website

Introduction

The overwhelming increase in information resources and its demand coupled with the ever dynamic changes in users' information needs, medium, and taste, have brought visible transformations in libraries and information centres in recent times. The rapid growth of new technologies has changed the communication process and reduced the cost of communication for individuals. Consequently, libraries have transformed into digital and virtual model where books, journals and magazines formats have evolved into e-books, e-journals, and e-magazines respectively; and this has increased the global dissemination of information (Abinew &Vuda, 2013). Today, people want to get information in the most convenient format and mode of access, time frame and from more reliable sources; of which the website fits perfectly.

The need for websites can never be overemphasized, as they are the fastest way to announce organizations, institution's and people's presence to the world; and an extension of the organizations/institutions that own them. Website, according to Kannappanavar, Jayaprakash and Bachalapur (2011) is a collection of related web pages, images, video or other digital assets that are addressed relative to a common Uniform Resource Locater (URL), often consisting of only the domain name, or the Internet Protocol (IP) address, and root path in an Internet protocol based networks. A website is hosted on at least one web server, accessible via network such as the Internet or a private Local Area Network. Website is one of the important tools to publish the activities of an academic institution since it provides the details of programmes, admission, examination, fees, faculty, calendar of events, placements, research and publications, library facilities and resources, among others. Hence, websites are said to be online representations of an institution or organization to the world, with the assurances of direct interaction with its community and reaching the widest audience possible.

As patrons continue to make greater use of the Internet, librarians now use websites as a means to facilitate access to specific Internet and other digital resources. These make it possible to expand the boundaries of ways to access, to browse and search information and get the resources and library services without physical visits to the library (Lehman, & Nikkel, 2008). In academic libraries, website is one of the perfect tools to organize, disseminate and facilitate access to electronic and print

resources. Its properties, composition and structure allow deepening and updating of the content. Also it offers various forms of communicating information, such as links, search engines, forums, documents, applications, audio, video, text, photographs, social media, and other new formats contributing to reduced limitations of time and space.

The relationship between users and library websites, however, is extremely important to be studied. As opined by Chow, Bridges and Commander (2014), library websites need to be easily navigable, including obvious signs that quickly lead the user to the information that they need to find. Websites have as little as 25–35 seconds to convince users that the information they are looking for is available, hence users quickly scan a webpage to determine whether they have what they need. As a method of website evaluation, usability test has been widely applied in various fields in particular web and system design and human-computer interaction. Usability indicates to what extent a website is easy to use, efficient in performing a specific task, and satisfactory for end users. In the recent years, usability evaluation also has been conducted in library communities to diagnose problems of current websites and to enhance website interface by better reflecting user viewpoints (Joo, Lin, & Lu, 2011).It is considered as one of the major factors that determine the successfulness of a website. As defined by Jokela, Iivari, Matero, and Karukka, (2003) usability is "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction a specified context of use".

Although universities in South East Nigeria have shown evidences of being supportive to their libraries, it is imperative to seek out means to bring their libraries to limelight. This, the study hopes to achieve through quality and functional library websites by improving on the websites' availability and usability; so as to make them useful to online users for improved service delivery, usage and posterity.

Statement of the Problem

The mission of library websites over the years has to some extent metamorphosed to accommodate the trendy needs and inquisitions of its users. Due to influx of ICT, users' approach to the library changed. With the availability of Internet and the growing number of Internet savvy students, many academic library users will

prefer to visit the library's virtual website more often than visit its physical location (Gbaje & Kotso, 2014). This obviates the permeation of websites into the core services of the library and information world. University libraries therefore, strive to serve users through the deployment of websites, so as to close the gap between the users and the library; as well as making available in the website, information domiciled physically in the library. As many institutions around the world have developed websites for their library services, there is need for Nigeria to key in.

Hence, it was stipulated by the Librarians' Registration Council of Nigeria (LRCN) in 2014, regarding the minimum standards and guidelines for academic libraries in Nigeria, that university libraries were mandated to design and host suitable websites. These websites should contain the best electronic resources for users to find whatever they are looking for at anytime and anywhere via the internet, to support their institutional mission. Considering the library website as: a tool that will help to speed up the librarians' work in assisting patrons to find information, and a tool that will help the user in expanding research or in finding the answer to simple questions; the library website is a must-have for university libraries. Unfortunately, as was observed by Mohammed, Garba, Umar (2014), some university libraries with websites in Nigeria seem not to have standalone dedicated websites, and seem to mostly present incomplete information and poor content. While this may not be true for some libraries, it still calls for proper investigation; especially as it has not been shown that there is a guideline or directory for university websites in Nigeria.

Despite the fact that library websites create information environments where the provision of information resources and services are no longer constrained by time and place, it is not clear whether the university libraries in Nigeria are actually doing the needful in using the website to provide information needed. Therefore, this study sets to draw attention and determine the functionalities of library websites in South East Nigeria.

Purpose of the Study:

The study specifically intends to:

1. Ascertain the availability of library websites in federal universities in south east, Nigeria
2. Determine the usability of federal universities library websites by undergraduates in South East, Nigeria.

Research Questions

The following research questions were formulated to guide this study:

1. What library websites are available in federal universities in south east, Nigeria?
2. How usable are federal universities library websites by undergraduate in South East, Nigeria.

Review of Related Literature

Availability of library websites in Universities

With the advent of the World Wide Web, the availability of information in electronic formats in libraries and other organizations has been made easier because of the web's graphic and interactive capabilities allowing users to search databases, view full text articles including pictures and Tables. As a result, organizations of all types are recognizing the importance of the World Wide Web as a tool, not only for gaining access to information, but also as a means of disseminating information about their activities, products and services (Kalra &Verma, 2011).Since a website is considered as an important promotional/informational tool for all kind of organisations, Pareek and Gupta (2012) stated that it informs the visitors about the institution, its mission, resources, services, activities, and so on; encourage visitors to interact with the services/resources; exchange services and products with electronic transfer of money; and establish continuous dialogue among the employees and the visitors. It becomes necessary that libraries being public service institutions should have more information in the public access through websites.

From their point of view, Balaji and Kumar (2011) opined that academic libraries were confronted when the web emerged as the potential replacement for information services. As the profound tasks of selecting, collecting, organising, and disseminating information was taken over by Internet, it became an uphill task to prove our ideal expertise in organising information with exemplary models of websites. Liu (2008) described academic library websites as libraries that provide "virtual presentation to the world. To Chakravarty & Wasan (2015), library website acts as a trustworthy mirror of the institute. Academic library websites provide access to online catalogues, electronic databases, subject resources, library instruction/tutorials, and digital collections. In alignment with each institution's mission, academic library websites are gateways to information that supports

faculty and students' research and educational needs". Thomas and McDonald (2005) had put it thus: Libraries are facing a new generation of online users who are technologically savvy and who integrate information access and use in all spheres of their lives to an unprecedented degree. They approach the traditional library with certain expectation that may conflict with the existing services, policies, and values of the library as information broker.

Unfortunately, it was observed by Mohammed, Garba and Umar (2014) that university libraries with websites are either owned by their parent organisations or by themselves, mostly presenting incomplete information and having poor content. Even after a decade of website development, Nigerian university libraries can neither define the needs of websites properly, nor have they any guidelines or directory to follow regarding existing practices or problems. Considering the library website as: a tool that will help to speed up the librarians' work in assisting patrons to find information, and a tool that will help the user in expanding research or in finding the answer to simple questions; the library website is a must-have for university libraries

Usability of Library Websites

Usability of information resources and services in very important in the library. According to Ebenezer (2003), usability is the degree to which a user can successfully learn and use a product to achieve a goal. It is often assessed in terms of a range of aspects: ease of learning, retention of learning over time, speed of task completion, error rate, and subjective user satisfaction. A web designer aims to create a site that is useful (enables users to achieve their particular ends and meets their needs), easy to use (enables users to move around the site rapidly and with few errors), visually attractive, and popular. A site should be user centred, in that it is based on knowledge of the site's users, in particular their technological and physical capacities, their cultural context, and their information needs.

In their discourse, Nagarkar and Murari (2012) stated that usability makes sure that the library websites are easy to navigate, so users can find their way quickly to e-resources. Though it has become easy to get access to a variety of information through library websites, the staggering amount of information available has produced a kind of "information overload" problem which can confuse and discourage users. There is a fundamental need for "usability" in library Web sites and usability testing is an invaluable tool for evaluating interfaces in terms of their

effectiveness and ease of use (Battleson, Booth, & Weintrop, 2001). According to Jones (2002), an excellent and effective library web site needs two ingredients. First, it has to have the content a user wants. Second, it needs to allow the user to browse, search and interact with the information in rich and flexible ways.
Usability studies focusing on library websites have consistently documented the typical behaviours of users. Overall, patrons have clearly established expectations of websites based on their prior web experiences. Patrons are most likely to read and use links on the left hand side of the screen. Users do not want anything elaborate; they expect the basics. Links, for example, need to be clearly identifiable as links and library jargon should be avoided (Emde, Morris, & Claassen Wilson, 2009). Eidaroos and Alkraiji (2015) explained that assessing website usability has become an essential requirement to improve universities' websites and users' interactions can be used to accomplish such improvements in a range of website components, such as a library's website.

Librarians have adopted usability testing as an essential step in the Web design process. Jakob Nielsen as cited by Emde, Morris, and Claassen?Wilson (2009) advocates that websites undergo frequent examination. Nielson asserts that testing more than five participants is a waste of resources because it is the point of diminishing returns. According to Nielsen, the only time testing needs to extend beyond five is when a site has many distinct user groups. Furthermore, employing a range of different usability methods in the development of websites, particularly from a user perspective, may greatly aid the effectiveness of such sites. Therefore, the evaluation of websites has been the subject of much practical research.

Method

The descriptive survey research design was adopted in this study. The study was conducted in federal universities in South East, Nigeria. The sample for the study comprises of 392 registered undergraduate library user determined from Yaro Yamene formula. The instruments used for the collection of data were observation checklist and questionnaire. Data obtained from the study were analysed using descriptive statistics, percentages and arithmetic mean.

Findings

Research Question 1

1. What Library Websites are Available in Federal Universities in South-East Nigeria?

Table 1. Availability of Library Websites in Federal Universities in South-East, Nigeria.

Item	N	Library Website Existence	URL of Library Website	Presence of Library Link on the University Website
Alex Ekwueme- FUNAI	5	❖	https://www.funai.edu.ng/library_/	❖
Michael Okpara Univ.- MOUA	5	❖	https://www.mouau.edu.ng/library	❖
NnamdiAzikiwe Univ.- UNIZIK	5	❖	https://library.unizik.edu.ng	❖
Federal Univ. of Technology- FUTO	5	❖	https://library.futo.edu.ng/	❖
University of Nigeria,- UNN	5	❖	https://library.unn.edu.ng/	❖
Valid N (listwise)	5			

Table 1 above indicates the availability of websites for libraries in Federal Universities in South-East, Nigeria. It showed that the five federal universities have library websites for their various libraries. The libraries have websites with Universal Resource Locators (URL) specifically for the libraries as seen in the table; while the libraries have links on the university main website.

Research Question 2

How usable are Federal Universities Library Websites to Undergraduates in South-East, Nigeria?

Usability of federal university library websites by undergraduates in South-East Nigeria were analysed in two segments: Table 2A: Understanding the use of the library website; Table 2B:Usability of the website.

Table 2A: Response on the Understanding of the Use of the Library Website

Variable	Ranked Options	Frequency	Percent
Found out about the library website?	Friend	140	30.8
	Library Workstation	90	19.8
	University Homepage	81	17.8
	Library Staff Member	48	10.5
	Search Engine	29	6.4
	Faculty Member	4	.9
	Total	392	86.2
Frequency of use of library website in the last six months	Weekly	168	36.9
	Never	82	18.0
	Less than a Month	62	13.6
	Monthly	59	13.0
	Daily	21	4.6
	Total	392	86.2
Browser used?	Chrome	210	46.2
	Google	101	22.2
	Opera	46	10.1
	Internet Explorer	18	4.0
	Mozilla	13	2.9
	Total	392	86.2

Table 2B: Response on the usability of library websites

Items	N	Mean	Decision
For accessing library catalogues	392	1.62	Never
For accessing databases	392	1.76	Never
For accessing reference materials	392	2.11	Less Often
For accessing full-text books	392	2.18	Less Often
For accessing journals	392	1.81	Never
For accessing newspapers	392	1.66	Never
For general information about reference services	392	1.80	Never
For general information about borrowing	392	1.79	Never
For general information about reserves	392	1.55	Never
For general information about interlibrary loan	392	1.34	Never
For libraries' hours	392	1.75	Never
For information about staff, archives	392	1.46	Never
For job opportunities	392	1.65	Never
For copyright information	392	1.51	Never
For what's new	392	2.05	Less Often
The vocabulary used on the website is clear	392	2.68	Clear
The information offered on the website is clear	392	2.33	Clear
Usefulness of the website for your research	392	2.55	Useful
Usefulness of "Search This Site", the option to search for things that are available on the site.	392	2.68	Useful
Librarian assistance on the website is	392	2.33	Fairly Useful
The visual appeal of the website site is	392	2.94	Good
Links to outside information are	392	2.62	Good
Valid N (listwise)	392		

Table 2B reveals that the students less often used the library website for accessing full-text books with a mean response of 2.18, accessing reference materials 2.11,

and using the website for "what's new" 2.05. They never accessed the library website for the other reasons such as accessing library catalogues, databases, journals, newspapers, and general information about reference services, reserves and borrowing.Furthermore on the clarity of information read from the website, the vocabulary used on the websites is clear 2.68, and the information offered thereon is also clear. The website is useful for their research 2.55, while librarians' assistance on the website is fairly useful. Also, the visual appeal of the website and links to outside information is good 2.94 & 2.62 respectively.

Discussion

The result of research question one revealed that the five federal universities have library websites for their various libraries. They have websites with Universal Resource Locators (URLs) specifically for the libraries; while the libraries have links on the university main website. This is no surprise, as libraries aim is to provide needed information to users and satisfy the needs of users. Library websites are best tools to access all the online resources (Savitha, 2016). **T**he availability of information in electronic formats in libraries and other organizations has been made easier because of the web's graphic and interactive capabilities allowing users to search databases, view full text articles including pictures and tables through the website.

In support of the findings, Kalra and Verma (2011) noted that organizations of all types are recognizing the importance of the World Wide Web as a tool, not only for gaining access to information, but also as a means of disseminating information about their activities, products and services. In Nigeria, *since academic libraries, the world over, have designed and developed websites to advertise their resources and services to the outside world, many universities have provided their library with a website while more are developing websites for their library to meet the new information superhighway's challenges (Kehinde & Tella, 2012).*

The findings on research question 2 revealed that students less often use the library website for accessing full-text books, accessing reference materials, and using the website for "what's new". They never used the library website for other reasons such as accessing library catalogues, databases, journals, newspapers, and general information about reference services, reserves and borrowing. This is no surprise as the resources and services are rarely being hosted on the websites, hence affecting how users use the library websites. According to Jones (2002), an

excellent and effective library web site needs two ingredients. First, it has to have the content a user wants. Secondly, it needs to allow the user to browse, search and interact with the information in rich and flexible ways.

Furthermore on the clarity of information read from the website, the vocabulary used on the websites is clear, and the information offered thereon is also clear. The website is useful for their research, while librarians' assistance on the website is fairly useful. Also, the visual appeal of the website and links to outside information is good. Eidaroos and Alkraiji (2015) explained that assessing website usability has become an essential requirement to improve universities' websites; and users' interactions can be used to accomplish such improvements in a range of website components, such as a library's website. Hence, to improve the usability of the library websites, it is imperative to work and improve the website, including all services users want, and providing easy to use website platforms.

Conclusion

From the interpretation and discussion of results of this study as they affect the research questions, the following conclusions are made: federal universities in south east have library websites for their various libraries with Universal Resource Locators (URLs) specifically for the libraries; while the libraries have links on the University main website.

The students also found out about library website through their friends, library workstation, and Library staff members. In the last six months, the users have approximately visited the library website on a weekly basis. However, as much as 18% of the respondents have never visited the library website. The students less often use the library website for accessing full-text books, accessing reference materials, and using the website for “what's new”. They never used the library website for other reasons such as accessing library catalogues, databases, journals, newspapers, and general information about reference services, reserves and borrowing.

Recommendations

Based on the findings of this study, the researcher wishes to make the following recommendations.

1. Libraries should start paying more attention to their websites as today's users are increasingly living their lives online. The users are now more technology savvy and find more resources online. A library neglecting to set an interface to help them achieve this is seriously heading for extinction, as

its pride days of relevance are tarnishing away due to influx of technologies.

2. Libraries should realize the importance of making their websites easily accessible, appealing, and current. A library hoping to engage users online should ensure that their avenues for communication with users and navigation aids are all fully implemented and functional in the website. Websites further incorporate web forms for communication, ready reference and instant response email links.
3. From time to time, the librarians should take a look at their websites, scrutinize, test-run, and ensure its usability is still as expected. This will ensure that users are not finding it difficult navigating the library websites.

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