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An Empirical Study of Factors Influencing Users' Satisfaction with Online Information Resources in Michael Okpara University of Agriculture, Umudike, Abia State.

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From its print-based traditional information resources, digital and e-resources is the new bride of library patrons including academic library users. E-resources have improved access to information for scholarship including users in Michael Okpara University of Agriculture, Umudike, Abia State. Availability of online information resources has increased users demand for more innovative services from academic libraries. Provision of online/e-resources has come with many challenges which require proper understanding by librarians. Using descriptive survey research method, challenges like demographic factors, scholars ability to get online information resources, possession of computers/laptops/Internet-enabled/smart phones, cost of access to online information resources and user' satisfaction with available online information resources were determined. A web-based survey and questionnaire correlated at 79% was used to collect data from 548 respondents representing 10% of the study population. An acceptable mean score/benchmark of 2.5 and above was adopted. The study discovered that demographic factors, ownership of computers/laptops/Internet enabled/smart phones, and satisfaction of scholars' information need influence use of electronic/online information resources.

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INTRODUCTION

Background to the study

Academic libraries are those libraries established to serve users in institutions of higher learning such as universities, polytechnics, colleges of education/agriculture/technology, etc and other such institutions (Edom, 2012),(Madu and Ademiran, 2005). The basic functions of academic libraries are to support and enhance teaching, learning, research and community development. Ifidon and Nkoli (2002) listed some of the basic functions/services provided by an academic library. The library in an academic institution is often referred to

as the nucleus of that institution around which every other activity revolves. In today's ICT world, the services of an academic library extends and expands beyond the four walls of the library as its services and resources are expected to be accessible to users irrespective of their physical location. Among this remote users are distant learning students who are part of the clientele of academic library. However, observations reveal that distant learning students are not even well served by existing library support services which they need (Mabawonku, 2004).

Michael Okpara University of Agriculture, Umudike (MOUAU) came into existence following decree no 48 of 1992 that established the university alongside with Universities of Agriculture, Abeokuta and Makurdi. The university library began its operation as a single division in a shared apartment with the then Library, College of Agriculture, Umudike, now relocated to Ishiagu, Ebonyi State since 1995.

The Library, MOUAU is today seen in a three department operation with seven units running under them in an ultramodern new library building. The library reading area has a total seating capacity of over 200 readers. Mr Arua is the present University Librarian with a total of forty-eight (48) staff. Out of this, eight are librarians, seven library officers, eleven library assistants, ten library attendants, a bindery staff, seven clerical officers, two porters and one ad-hoc staff. (Source: Staff Nominal Roll, 2014). Print collection records from the acquisition department reveal that the library has over 23,000 volumes of books covering all areas of agricultural sciences and allied disciplines.

The library has 5000 volumes of reference materials, including dictionaries, encyclopedias, directories and research reports of students (Ugwunna and McAlbert, 2014). A variety of sources and resources are today available to students, faculty members and other patrons of academic libraries. These include: stand-alone computing using digital devices, Internet-based sources and services which are mainly information resources available on the web and Internet gateways.

The library has an ICT unit and a digital library. The digital library is, however, not located in the library building because of lack of adequate facilities to support it. The digital library is located at and supported by the University ICT/Afri-Hub partnered centre. This digital library housed in the Afi-Hub building has forty-four (44) computers linked to a cable modem connected to the Internet. Afri-Hub is a private company working in partnership with the National Universities Commission (NUC)/Federal Universities in Nigeria. The library also employs the wireless access of the MOUAU ICT centre to make available to both staff and students the digital contents of the library via Wi-Fi Hotspot Antennae mounted at various locations on the campus.

The state of the Internet access, however, is bad. The bandwidth at AfriHub which provides Internet access to the company's business classes and to the digital library is very low (Uzuegbu, 2012). That of the ICT department of the university is also nothing to write home about. Thus, Internet access most times especially when too many users are online can be very frustrating especially when students spend time and at the end fail to use the e-journals or fail to download the documents they need. The library subscribes to e-journals and databases that publish articles free and allow students, lectures and other users to access, read, download and print any part of the publication. These e-journals and databases and their scope are presented as follows:

AGORA: Access to Global Online Research in Agriculture data base is by the Food and Agriculture Organization (FAO) and major publishers, enables scholars and researchers in developing countries to access digital information on food, agriculture, environmental and other related sciences. AGORA: provides a collection of 1900 journals to institutions in 107 countries. AGORA database can be found at: www.agInternetwork.org

OARE: The Online Access to Research in Environment is a global consortium of over 340 scholarly scientific publishers and societies offering one of the world's largest collections of online environment research literature. It provides access to about 1.5billion scientific papers, representing about 75% of the world's most influential peer-reviewed publications. It is coordinated by United Nations Environment Programme (UNEP) and Yale University in association with International Association of Scientific, Technical and Medical Publishers among other sponsors. It is available at: www.oaresciences.org

HINARI: Health Inter Network Access to Research Initiative is a database by the World Health Organization (W HO) and major publishers to enable developing countries to gain access to about seven hundred (700) biomedical and health journal titles accessible at: www.who.int/hinari

TEEAL: The Essential Electronic Agricultural Library is a collection of 130 major agricultural journals in 426 CD-ROMs (2005version) and independent of Internet availability or network. The library has acquired the LAN 2.0 version of TEEAL containing 141titles. The ICT office of the library located in library building has this equipment with two computers that enable

researchers to read and copy the contents of the CDs. The website for is: www.teeal.org.

At the Library MOUAU, students and faculty members access more than twelve thousand (12,000) scholarly journal titles covering agriculture related subjects online. It is mandatory for both undergraduate and post graduate students to pay a sum of five thousand naira (N5,000) in exchange for a sixty-hour time code valid for an academic session. With the time code, students can go to the ICT Computer Laboratory, the Afri-Hub Café' or to the Digital Library, type in their code (username and password) to access the Internet as all the computers are set on "time". On the other hand, staff members obtain a wireless access code for the same amount deductible from their salary upon request.

Thus, both staff and duly registered students with their pre-paid Internet access account from the University ICT Directorate have access to these e-resources. The library has also embarked on a digital repository project starting with students' final projects, thesis and dissertations and plans are at advanced stage to bring on board other publications and information materials emanating from the university.

LITERATURE REVIEW

Digital library is an emerging concept in librarianship in Nigeria even as libraries in the developed countries have been providing digital/e-resources since many decades ago. (Borgman, 1999), agrees with the Digital Library Federation that digital libraries have unique characteristics that differ from traditional libraries in their approaches to information provision. From a traditional librarian's point of view, digital libraries present a transformative model of a large-scale user-centric organization with various integrated components.

However, the main purposes of both digital/e-libraries and traditional print-resources libraries remains to acquire, process, disseminate, store and preserve information resources. The World Internet Statistics (2011) reported that over forty million (4o million) Nigerians use the Internet and many of them are youths. This corroborates Aina (2004), Abels (2005) findings on the increased use of the Internet by scholars, researchers and other users.

Many academic libraries have automated their operations and can now provide online services to their patrons due to the availability and affordability of Internet services. Integrated library systems are available in academic libraries which enable them to provide research and learning resources electronically free and by institutional license (Bazillion, 2001). These and many more are the variety of information-driven innovations that has thinned the library world thereby expanding and extending the horizon of services which academic libraries provide.

According to Uhegbu (2007), information is a vehicle for national development and access to and use of information is also a necessary vehicle that conveys knowledge which is education that drives the development of every nation including Nigeria. Access to information through co-operation among academic libraries is an important instrument for enhanced educational pursuit by any nation. This is the thrust of discussion of issues of access to online information resources to assist scholars to obtain the information they need. This is true especially for academic libraries and institution that promote and support institutional repositories which assist scholars to publish research and reports and improve their visibility (Ezema, 2010).

Libraries world-wide rarely have all the human, material and financial resources needed for effective and efficient service let alone libraries in Africa that do not have enough resources to sustain journal subscription which negatively impacts on their service provision (Ephraim, 1991). As a result, scholarship in Africa is faced with challenges of online services arising from weak infrastructural and information systems development resulting sometimes to total network failure, Okogwu and Nnam (2013) and Sheik and Bray (2011). The prevailing economic recession in Nigeria makes it necessary for available resources to be judiciously deployed to execute tasks that will assist the university to achieve its desired goals and objectives in the area of academic excellence.

Access to electronic information resources allows users global access to unprecedented number of primary and secondary sources for research activities. This paradigm shift to access and documentation to large volumes of information is contained in previous studies (Ikpaahindi, 2006). E-resources have numerous advantages when compared to buying print or physical versions. Other advantages of e-resources have been documented by other writers like Kahle, Prelinger and Jackson (2001), Okiy (2010) and Trevidi (2010). Nevertheless, Echezona and Ugwuanyi (2010) listed some of the impediments/challenges inimical to access and use of e-resources. Furthermore, McAlbert and Oriaku (2014) reported some causes of low use and non use of online information resources in the library, MOUA, Umudike.

To access and retrieve online information resources require that users possess skills, availability of information resources and even time to seek for information resources. Some writers have listed other factors that affect the information seeking of different user groups. These include language, income, educational level, rank, sex, religion, economic, social and even psychological factors (Alemna, 2000). Cost of locating and accessing online resources has long been identified as a possible factor that can influence sources of information used by a library patron (Curley et al, 1996)

and (Dalrymple,1990). Bozimo (2007) bemoaned the low level use of electronic data bases in academic libraries in Nigeria.

In the same vein, Uzuegbu, Chukwu and Ibegwam (2012) reported that scholars' ignorance of existing electronic information resources, unfriendly user interface and usability are among the numerous challenges facing the use of e-resources in academic libraries in Nigeria. This report indicates that both subscription and free e-resources are not fully utilized by many library patrons. These reports have led to series of efforts being made by the Nigerian Universities Libraries (NULIB) in organizing workshops aimed at ensuring that students and scholars make adequate use of available electronic information resources in university libraries in Nigeria.

Many options, however, are open to libraries, information managers and professionals of today. The purchase of CD-ROM databases at a point was seen as a viable alternative by many libraries especially those that do not have access to the Internet or reliable network connectivity. The use of CD-ROM and its advantages and challenges has earlier been explored in papers by Ojo-Igbinosa (1993) and Dubbeld (1995). Such databases are usually hosted in libraries as well as distributed to some remote workstations even on a campus-wide basis. Web gateways or data bases, electronic books and journals are subscribed to by many academic libraries but due to ignorance or lack of knowledge of their availability, scholars prefer search engines such as Google, Alta vista, yahoo and the rest. As a result of this seeming lack of interest in the use of e-resources in academic libraries by scholars, there is lack of institutional support to library heads on issues of e-resources.

Nevertheless, libraries are faced with enormous challenges which adversely affect the way information service is provided. Out-sourcing of digital library projects is an option which many libraries resorted to find solution to their individual challenges (Grossman, 2005). Today many libraries pay more attention to access to remote collections wherever they may be found against acquiring print collections. A well planned and coordinated digital/electronic library can guarantee users' access to a wide variety of information resources once all the necessary infrastructural and man power requirements are provided.

Today, librarians, researchers and scholars in many fields realize the potentials of these new approaches to research and learning activities. The interest generated by the use of e-resources over the past decades has led to series of studies to look into different areas of notable challenges to the optimal use of e-resources in academic libraries to see how these can be addressed to improve access and use. The wide spread use of ICT by researchers, lecturers and students no doubt is part of the reported continued increase in the unprecedented quantum of scholarly publications or works available on the Internet(Abels, 2005).

The growth of information technology and the resultant online learning has led to librarians acquiring fewer print materials while providing more access to digital resources (Kane, 1997). Virtual services and resources provided by libraries generally consist of reference assistance, e-books, electronic journals and magazines, online databases, online library catalog, tutorials, interlibrary loan form, book delivery, instant or quick search and Internet links. Researchers have conducted studies to examine the changing roles of the library, library staff and the balancing of print journals and electronic collections with respect to the accessibility and need of virtual patrons and users preference for online e-resources (Ugwunna, and McAlbert, 2014) and (Uzuegbu, 2012).

Scholarship in Nigeria like in many parts of Africa is faced with a lot of challenges in the provision of information resources including online information resources. Librarians on their part face increased challenge to continuously assess and update their print resources and services and at the same time provide collections and services to online library users which require advanced technical skills and knowledge. This new trend in information access and use find support in the assertion by Unegbu (2011) that:

Today people can stay in their homes and requestand get whatever information they want.

METHODOLOGY AND INSTRUMENTS FOR DATA COLLECTION

Descriptive survey research method was adopted to determine the influence of some demographic factors on the use of online resources by scholars. To find out whether scholars are satisfied with online information resources in the library under study. Simple statistics was used in analyzing the data which was obtained with the aid of a questionnaire which contained five research questions. A web-based survey was carried out and questionnaire correlated at r =79 was used in data collection.

Data was analyzed with four-point Likert scale and weighted mean score of 2.5 was the accepted benchmark while any mean below 2.5 was rejected. Responses were rated: Strongly Agree (4) Agree (3) Strongly Disagree(2) Disagree (1). The population for this study was the 5,475 students and faculty members of Michael Okpara University of Agriculture, Umudike and other non staff and non students of the university who consulted the e-resources of the library from within and without the university during the 2016 academic session. Using Borg and Gall (1973), a randomized sample size of 548 representing 10% was drawn from the population.

Table 1: Responses to Research Questions

		SA	A	SD	D	WM
Q1	Do certain demographic factors influence use of online information resources?	193	160	120	75	2.8
Q2	Do scholars know how to access the needed information from online resources?	143	262	102	41	2.9
Q3	Do scholars own desktop computers/laptops/smart phones/Internet enabled handsets?	325	197	18	10	3.5
Q4	Do cost of access affect scholars' use of online resources?	210	237	10	91	3.0
Q5	Do online information resources satisfy scholars' information need?	146	217	105	80	2.8

OBJECTIVE

The aim of this research is to determine some factors which influence users' satisfaction with available online resources and services in the library, Michael Okpara University of Agriculture, Umudike.

STATEMENT OF THE PROBLEM

Meeting users' need in academic libraries is a difficult and complex task for librarians due to information explosion, ICT's seamlessness, low price of computers and sophistication of library patrons in the era of reduced library funding. Technology acceptance, technophobia and inadequate information literacy skill by users to enable them to access available online information resources in libraries are some of the challenges faced by many academic librarians in Nigeria. There is also problem of lack of knowledge of the availability of e-resources. As a result of the above, there is need to find out how these challenges affect the satisfaction of users of electronic/online information resources in the library, MOUA, Umudike.

SIGNIFICANCE OF THE STUDY

The outcome of this study will immensely assist in the management of e-resources in similar academic libraries when faced with vital decisions affecting students, faculty members and other researchers' use of electronic information resources and services. This investigation will help in decision-making especially with respect to balancing the allocation of scarce resources between digital/e-resources and print resources in the event of the integration of both digital/e-resources and print resources by avoiding duplication and waste of scarce resources. This study will lead to a better understanding of online users' experience which will help digital librarians/ front desk librarians who deal directly with library patrons. It will also assist librarians to deal with challenges of access and use of online/e- resources to support research and scholarship in the face of continued reduced funding of libraries services generally.

RESEARCH QUESTIONS

(1) Do certain demographic factors influence use of online information resources?
(2) Do scholars know how to get the need information from online resources?
(3) Do scholars own computers/laptops/smart phones Internet enabled handsets?
(4) Does cost of access affect scholars' use of online/e- resources?
(5) Do online information resources satisfy scholars' information need?

DATA PRESENTATION

This chapter presents the responses by the scholars in Table 1.

DISCUSSION OF FINDINGS

From table 1, one can see from the scholars' responses that certain demographic factors indeed influence or affect their use of online information resources considering the weighted mean of 2.8. In the same vein, getting the needed online information resources, ownership of computers/ownership of Internet enabled telephone devices, cost of access and satisfaction with available online resources all got a benchmark or mean of 2.5 and above. This translates into a general agreement that certain demographic factors influence/affect the use of online information resources. The issue of cost of access to online resources is notable even as this is in agreement with the submissions of Curley (1990) and Dalrymple (1990) in their separate studies. Scholars' agreement that available online resources satisfy their information need is important because this singular variable is the major aim of every information services facility. Getting the needed information from online resources is in tandem with Abels (2005) reported increase in the use of the Internet which can be attributed to the avalanche of publications on the

Internet. The assertions from this study point to the fact that some demographic factors really do affect/influence the use of online information resources just the same way they affect the use of printed information resources.

CONCLUSION

The study revealed that demographic factors influence use of online/ e-resources in academic libraries like MOUA, Umudike which was the focus of this study. An interesting highlight of the study is the response by patrons that they get the information they need and that the available online/e-resources satisfy their information need. This should remain the main focus of information services delivery for every library and not just academic libraries.

RECOMMENDATION

Identified challenges/impediments militating against the use of online/e-resources in libraries generally and not just academic libraries must be addressed to enable users to maximize the use of available information resources bearing in mind that they come at a huge cost to the institutions and public revenue.

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