OPPORTUNITIES AND CHALLENGES TO ELECTRONIC RESOURCE SHARING IN UNIVERSITY LIBRARIES: EMPIRICAL EVIDENCE FROM NIGERIA

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Abstract

Purpose: The study appraised the opportunities and challenges of electronic resource sharing in Nigerian university libraries.

Design methodology/approach: The qualitative case study design was adopted for the study. Face-to-face interviews and telephone calls were employed. The population of study comprises of librarians working in the ICT/E-Library of selected university libraries in south-east and south south Nigeria. Eleven (11) librarians were purposively selected for the interview.

Findings: The study indicates that though e-resources are available in the university libraries, none of the libraries surveyed is involved in e-resources sharing. Sharing e-resources will give the library opportunity to provide library patron with more current and relevant resources to meet their needs. Proliferation of open access resource and indifferent attitude of heads of libraries towards e-resources sharing is a major challenge to e-resources sharing; It was revealed that development of strong e-resource sharing policy (ESP) would facilitate functional sharing of electronic resources.

Research limitations/Implications: Nine (9) university libraries were used as case study. The questions were designed to elicit data on the challenges and opportunities inherent in electronic resource sharing in university libraries.

Practical implication: The results have provided the platform for further research on the subject matter of electronic resource sharing practices in university libraries using other zones of Nigeria and other developing countries.

Originality/value: The study is unique because it has provided objective empirical evidences and not just theoretical perspectives. Conclusion: there is an urgent need for e-resources sharing policy (ESP) in university libraries.

Keywords: Electronic Resources, Resource Sharing, University Libraries, Nigeria

Introduction

Libraries in institutions of higher learning occupy a central position in the overall academic activities and by design and laws establishing them are expected to support the core mission of their parent institution which includes teaching, learning and research. It is in line with this that, librarians in university libraries consistently take practical steps to ensure that information resources relevant to core subject areas of parent institution are acquired and organized towards the realization of the fundamental philosophy behind the establishment of such institution. University libraries are always at the forefront of academic and accreditation of courses in the universities through the provision of information resources in varied format (Aliyu & Joseph, 2017). However, the library environment of both developed and developing countries has been significantly transformed by the penetration of technologies. These transformations have changed the way library services are provided, more so with these changes being maximized to meet the user's needs and expectations. Information and communication technologies and the Internet have brought about several opportunities as well as challenges to how effective library and information services are rendered, (Chegwe and Anaehobi, 2015). The dramatic growth in the capabilities of computers and communication technology networks has not only radically revolutionized the process of resource sharing, but has also brought about a fundamental transformation from the traditional approach to a modern

approach, (Usman, 2006). Librarianship, at its simplest level, is a profession that seeks to bring the patrons and the information that they need together in the quickest and most cost effective manner possible. (Ferguson, 1996:86). Usman (2015:347) x-raying the landscape of librarianship from the earliest time to the present day asserted that:

> The earliest paradigm that preserved library and information service for quite long has fallen to the glory of modernization; it is obvious that global development of the library profession has come with a greater responsiveness to technology, precisely the information and communication technology.

Similarly, Aina (2013:77) writing about the changes witnessed in the landscape of librarianship asserted that:

> The evolving information and knowledge based economy has resulted in a climate of tradition and change, especially in academic libraries around the world. The rapid pace of development in the field of information technology coupled with the advent of networked information services has called for a total review of library services for resource sharing approach in this age of the digital divide.

These changes have brought about integration of electronic resources in provision of library and information service delivery in university libraries. Library electronic resources consist of all resources in electronic form in the university libraries collections. These resources include databases, electronic serials, digital documents, e-books, e-journals, CD-ROMs and free Internet collections that have been catalogued by the library in its OPAC (Asiru, 2017). Academic libraries in Nigerian universities make available a wide variety of electronic information resources (EIRs) for use by the undergraduates, postgraduates, researchers and staff in their respective institutions (Song and Song, 2017).

Nevertheless, no individual library in the globe today can boast of holding every item needed to satisfy the information needs of its users, especially in this era of economic downturn. In spite of this situation, most libraries seek for opportunities that would enable them satisfy their patrons. The need for access to information to support academic activities has shown libraries that this need could not be satisfied with their own holdings alone due to inadequate money, manpower, and space. As a consequence of the perception of this situation, libraries started organizing networks and consortia with the aim of resources sharing (Geronimo and Arago, 2005:426).

Resource sharing can be described as the information resources typically collected by the libraries and made available under certain conditions to the users in order to disseminate information properly (Ogunrewo, Zubairu and Peter, 2015). It means utilizing information resources of one library for generating services of another library (Rabiu, 2012). Resource sharing is a novel and wise path to meeting library's endless information demands and there are many forms of resource sharing with libraries consciously and unconsciously engaging in one form or the other (Nwegbu, Echezona and Obijiofor, 2011). Libraries today are expected to share variety of information resources in order to meet the demands of library patrons; one of such is e-resources. Facilitating access and use of online information resources is one of the ways an academic library can achieve the objective of service delivery and meeting the needs of the library users (Njeri & Njiraine, 2017, p. 105).

Electronic resources have become increasingly substantial component of academic library collection due to continuous development of information technology (Bamigboye, Owolabi and George, 2011:14). Electronic resource sharing is not inter-library loan (Manjunatha & Shivalingaiah, 2003). Olowonefa and Funom (2013:3) writing on electronic resources stated that:

> Electronic resources are invaluable research tools that complement the print-based resources in a traditional library setting. Their advantages include: access to information that might be restricted to the user due to

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geographical location or finances, access to more current information, and provision of extensive links to additional resources related contents.

A number of electronic resources initiatives have been put in place to help students to access current and up-to-date e-resources for their studies and researches (Olowonefa & Funom, 2013). Electronic information resources have evolved over the years (Agboola, Okorie, Omotoso, Bamigboye & Bellow: 2015). Electronic information resources are collections of information in electronic or digital format that are accessed on an electronic device, such as a mobile phone, computer etc. They are published resources in electronic versions/format such as encyclopedias, pamphlets, e-books, e-journals, databases (Ezema & Anezi, 2016).

E-resources as noted by Fabunmi (2017) may include e-journal, e-discussions, e-news, data achieves, e-mail, online chatting, etc. They refer to a wide range of products going from electronic periodicals to CD-ROMs, from mailing list to databases, all of them having a common feature by a computer. Electronic resources have become increasingly substantial components of academic library collection and this is due to the continuous development of Information Technology and its impact on library collection development policies due to changing demands of users for exhaustive information within a short time (Bamigboye, Owolabi and George, 2011). Electronic resources consist of information resources provided in electronic formats such as CD-ROMs, databases, e-books, e-journals, online databases, Online Public Access catalogues, and other computer-based electronic networks (Olabode, 2016). Electronic resources commonly found in academic libraries are: computers (laptop and Desktop), internet facilities, fax machine, and photocopy machines (Vandi & Anjili, 2017).

Electronic information resources, (electronic resources or e-resources) are collections of information in electronic or digital format that are accessed on an electronic device, such as mobile phone, computer etc. They are published resources in electronic versions, format such as encyclopedias, pamphlets, e-

books, e-journals, databases (Ezema & Leonard, 2016). Electronic information resources include the different kinds of electronic information and digital collections that continue to bring new development to the field of librarians (Fabunmi, 2017).

Information resources were mainly in print form until recently, that electronic resources such as electronic books, electronic journals, websites, library portals and databases on CD-ROM have become major information resource for libraries (Mohammed, 2015). However, with the introduction of technologies, internet and multi-media and their applications to library services and products as well as conversion of print content to electronic formats, users are provided with continuous flow of information resources 24/7 with unrestricted access globally (Inazu, 2012). Mohammed (2015:78) writing on the place of ICT on electronic information resources and services stated that:

> The advent of information and communication technologies (ICT) heralded the emergence of electronic information resources and services which have become an indispensable source of information for university libraries. The information technology environment has significantly changed information generation, access and use.

Electronic resources have become an integral part of libraries assisting users in learning, teaching and research (Olowonefa & Funom, 2013). No doubt, university libraries in Nigeria are involved in storing of various information resources to achieve the cardinal objective of the universities but there seems to be no empirical evidence based on research within reach as at the time of this study showing that electronic resources are being shared among these libraries. It is against this backdrop that this study is carried out with the intention of providing empirical evidences of e-resources sharing in university libraries in south east Nigeria.

Statement of the Problem

Access to information resources is one of the key tasks carried out by library and information centres. However with the penetration of ICTs

to the domain of librarianship, these functions have taken a new dimension. Nevertheless, in spite of the overwhelming influence of ICTs in the provision of access to information resources, library users still complain of non-access to information resources while libraries on their own part complain of inadequacy of fund to provide information resources to its teeming users both in the conventional and online environment. To reduce the negative impact of non-access to information resources, libraries engage in resources sharing. The question here is how feasible is resource sharing in contemporary society, especially in a developing nation like Nigeria. It is against this backdrop that this paper aims at examining the opportunities and challenges to electronic resources sharing in Nigeria university libraries through an empirical approach.

Objectives of the Study

The study was guided by the following objectives, which are to:

i. identify various electronic resources that are available and shared in Nigerian university libraries;

ii. determine the opportunities associated with electronic resources sharing in Nigerian university libraries;

iii. ascertain the challenges associated with electronic resources sharing in Nigerian university libraries; and

iv. identify strategies that would facilitate functional sharing of electronic resources in Nigerian university libraries.

Research Methodology

A case study design was used and data for the study were collected through in-depth face-to-face interviews and telephone calls. The respondents were selected through purposive sampling technique. The sample population included librarians working in the ICT/E-Library units of the selected universities. Interviews were conducted with eleven (11) librarians purposively selected from the ICT/E-Library Sections. The justification for adoption of direct interview and phone calls to librarians directly in charge of ICT/E-library sections in these institutions is to ensure that authentic and valid facts would be generated upon which information would be based. A total of nine (9) university libraries in federal government and state-owned universities in south east and south south zones of Nigeria were studied.

The table below shows the universities surveyed

S/No	Name Of Institution	Ownership	Geographic Location	Number of Respondent Sampled
1.	Abia State University Library, Uturu	State Government	South East, Nigeria	1
2.	Ebonyi State University Library,	State Government	South East, Nigeria	1
3.	Federal University of Petroleum Resources Library, Effurun	Federal Government	South South, Nigeria	1
4.	Federal University of Technology Library, Owerri	Federal Government	South East, Nigeria	2
5.	Imo State University, Owerri	State Government	South East, Nigeria	1
6.	Michael Okpara University of Agriculture Library, Umudike	Federal Government	South East, Nigeria	1
7.	Rivers State University, Port Harcourt	State Government	South-South, Nigeria	1
8.	University of Nigeria Nsukka	Federal Government	South East, Nigeria	2
9.	University of Port-Harcourt	Federal Government	South-South, Nigeria	1
	Grand Total			11

Review of Literature

Electronic information resources according to Chimah and Nwokocha (2015) as cited in Song and Song (2017) are information resources that are available and can be accessed electronically through such computer networked facilities as online library catalogues, the Internet and the World Wide Web, digital libraries and archives, government portals and websites, CD-ROM

databases, online academic databases, such as AGRIS, AGORA, Medline or Commercial databases such as LexisNexis. Electronic Information resources exist in digital format unlike traditional information resources that are physical in nature (Mohammed, 2015). Electronic resources are invaluable research tools that complement the print-based resources in a traditional library setting with advantages such as access to information that might be restricted to the user due to geographical location or finances, access to more current information, and provision of extensive links to additional resources related contents (Olowonefa & Funom, 2013).

The role of resource sharing in alleviating the inadequacy of information and human resources associated with library services as noted by Rabiu (2012), was long realized when library professionals and associations started the agitation for resources sharing activities among libraries. Onwubiko, Onu and Ossai-Onah (2013) observed that electronic information resources in reality have become a complement to traditional resources especially in developing countries where funding is fast limiting the quality and quantity of stocks available in most academic libraries. Inazu (2012) citing several authors like Lakan (2008) and Ukpebor (2012) articulated the several benefits of e-resources to include searching of multiple files at one time, saving of time/facilitating of interlibrary loans, multimedia capability profitability, data security, huge storages capacity on site availability. Olowonefa and Furom (2013) observed that electronic information resources have become an integral part of libraries assisting the users in learning, teaching and research. These resources are quick to access, save time and keep up-to-date with current happenings in the specific fields and related areas.

Aina (2013) affirmed that electronic resources can only be accessed via computers. However, the importance of this is that, for a library to render e-resource service, it must have computer facilities and the infrastructure to support such. These to him, include consistent electricity, air-conditioned rooms/halls, computer literate staff and library users,

maintenance culture, fund for subscription etc. According to Mannan and Bose (1998), the major factors that affect the networking of libraries are: availability of computerized databases; availability of communication facilities (computer, telephone, satellite communication, reprography, fax, e-mail, etc); standardization of library organizational practice; availability of financial resources; efficiency in the governance of network and basic agreement. Sharif (2006) posit that the problems of information explosion, ever changing users needs, shrinking library budgets and currency devaluation can be overcome to some extent, through resources sharing.

Adam and Usman (2013) described the problems of resources sharing in Nigeria as inadequacy of existing resources, lack of information about them, inadequate security of materials, uncooperative attitudes of the parents' body, lack of policies, inflation and unstable budgeting allocation and lack of union catalogue. Nwosu, Okeke and Ejedafu (2013) in their study noted four major problems associated with electronic information management and they include inadequate funding for electronic information management, insufficient computers, escalating cost of connectivity and attitude of university authorities towards library networking.

Kasalu and Ojiambo (2015) writing on the experiences of resource sharing at university libraries in Kenya contends that even though there have been many efforts that have been initiated to fuel information resource sharing activities in the country, that these initiatives have not born much fruit in improving information resources sharing activities among university libraries in Kenya. Ogunrewo, Aishatu and Olajoke (2015) noted that lack of effective policies, epileptic power supply, and bibliographic compilation with lack of support from the parent institutions among other identified factors affect libraries engagement in resources sharing activities.

Anyaogu (2011) noted that resources sharing have been restricted to the areas of lending books and that with the advent of ICT, the resources sharing has been diversified. Blakes (2006) noted that though resources' sharing is

advantageous as it helps to meet the needs for provision of information and materials to the clientele, it has been however discovered that libraries operate resource sharing cooperation only in terms of contributing library information on paper based formats. Ogundipe and Adebowale (2010) explained that electronic resources can only be accessed via computers, which implies that for a library to render e-resource service, it must have computer facilities and the infrastructure to support such. These to them, include consistent electricity, air-conditioned rooms/halls, computer literate staff and library users, maintenance culture, fund for subscription etc. Asiru (2017) explained electric supply as an important infrastructure in the provision and use of library electronics resources and most university libraries used in this study had provision for alternative electricity inverter and generating set in case of power outages. However, Kasalu and Ojiambo (2015) observed that resource sharing activities such as document delivery and consortia arrangements for acquisition and sharing of e-resources have become practices in recent years.

Njeri and Njiraine (2017) in their study revealed that the information resources highly used at the University of Nairobi were e-journals (60%), online databases (20%), e-books (13%) and e-thesis (7%). Similarly, Olabode (2016,) noted that respondents from Federal University of Oye-Ekiti, (FUOYE), Nigeria used different types of electronic resources such as the NUC Virtual library, electronic databases, search engines like Google, science direct, electronic newspapers/magazines, etc for their information needs.

According to Bamigboye, Owolabi and George (2011:14), libraries of all sizes and types are embracing electronic resources, although most libraries will continue to offer both print and digital collections for many years to come. They noted further, that with the growing popularity of e-resources, the traditional libraries are gradually migrating from print documents to e-resources. Ezema and Leonard (2016) suggest that electronic gadget that aid access to electronic information resources should be

kept in a good condition always, as this will enable the library to live up to her task of making electronic information resources readily available and accessible by users. Asiru (2016:106) is of the view that university libraries should strive to update their ICT facilities and that the bandwidth subscription rate should be informed by the number of users and available computers. Mohammed (2015) recommends that the university libraries should intensify provision of electronic services beyond mere access to public internet-based resources and services in the area of electronic information services. He contends that the university libraries should provide electronic library services such as OPAC, subscribe to databases, (off and online), online institute and online enquiry to enrich libraries information resources and services for the clientele of university libraries. Mannan and Bose (1998) in their study noted that, to improve the prevailing poor services, care should be taken to provide efficient resource sharing systems among the libraries through better management and use of modern technological facilities.

Findings and Discussions

The findings of the study are discussed and organized in line with the objectives of the study.

Question one sought to identify forms of electronic resources that are available in the university libraries selected, and if these resources are shared with other libraries. In this respect, respondents gave the followings as e-resources available: multimedia resources, CD-ROMs, DVDs, e-conference papers/proceedings, online databases, e-books, e-journals, electronic thesis and dissertation (ETDs), e-newspapers, portable document files, and open access resources. This findings validate the observations of Onwubiko, Onu and Ossai-Onah (2013) that electronic information resources in reality have become a complement to traditional resources especially in developing countries where funding is fast limiting the quality and quantity of stocks available in most academic libraries. However, it was disheartening to discover that none of the libraries studied is involved in e-

resources sharing. The reason adduce for this was that no libraries has indicated interest in sharing electronic resources. One the respondent explained:

"In as much as the e-resources are available, none of the sister-institutions have indicated interest in sharing of e-resources'. It is when interest is indicated, we can now talk of sharing the resources, as well as the best approach to adopt"

Question two sought to ascertain opportunities associated with electronic resources sharing in selected university libraries in south-east and south-south Nigeria. Though these libraries do not share their resources, the librarians working in the ICT/E-Library unit acknowledged the various opportunities opened to libraries, and they are:

o   promoting of library and information services;

o   reduction in the cost of disseminating information resources;

o   improvement on resources collection and quality of service delivery;

o   advancement of the profession of library and information science;

o   facilitating of quick and ready access to information resources;

o   building of positive image of the library science profession;

o   meeting of the needs of library patrons becomes faster; and

o   Libraries through e-resources sharing can provide library patrons with more current and relevant resources to meet their needs.

According to one of the respondents *"As much as libraries share e-resources with other libraries, the issue of inadequate resources will no longer be there, the issue will be connecting the users to this resources".* One respondent further state that *"the opportunities depends on the nature and formart of the e-resources, for instance, you need network (Internet Connectivity) to access online resources, where as offline database resources can be accessed in the absence of Internet connectivity."*

It was also noted by another respondent that *"the level of patronage will increase because the library will be better positioned to serve the needs of the users, sharing e-resouces will make it easier for libraries to meet needs of users, despite gross underfunding of university libraries by government and parent institution".*

These findings corroborates the submission of Sharif (2006), that the problems of information explosion, ever changing users needs, shrinking library budgets and currency devaluation can be overcome to some extent, through resources sharing.

Question three sought to identify the challenges affecting functional electronic resources sharing in Nigerian university libraries. Respondents were asked to highlight on some of the challenges affecting functional electronic resource sharing. The collation of their responses reveals the following challenges:

a.   inadequate knowledge of benefits of resources sharing;

b.   proliferation of open access resources which makes it almost unnecessary to share resources for libraries exploring this innovative library practice;

c.   indifferent attitude of heads of libraries towards e-resources sharing;

d.   non-existence of e-resources sharing policy (ESP);

e.   uncooperative attitude of sister libraries towards e-resource sharing initiatives;

f.   lack of steady/stable internet connectivity; and

g.   unavailability of network/computer facilities.

The above finding is in line with Aina (2013) affirming that for a library to render e-resource services, it must have computer facilities and the infrastructure to support such. Also, it validates the submission of Nwosu, Okeke and Ejedafu (2013), that attitude of universities authorities towards library networking is a challenge.

Question 4 sought to ascertain the strategies that can be adopted for effective sharing of electronic resources. The respondents were asked to suggest strategies that can be adopted for effective sharing of electronic resources. The respondents suggested the following strategies:

- provision of efficient resources sharing systems;
- development of strong e-resource sharing policy (ESP);
- provision of strong internet access for libraries;
- creating of awareness on the benefits of e-resources sharing;
- training and retraining of library staff; and
- provision for alternative electricity inverter and standby generating set in case of power outage.

Conclusion

E-resources are gradually becoming a prominent feature of contemporary university libraries and not integrating it into library and information services provided in universities is nothing short of driving behind the clock of technology and development. The study has extensively examined the opportunities and challenges to electronic resources sharing in university libraries. The findings clearly demonstrate that despite the benefits associated with e-resources sharing; most university libraries are not harnessing the opportunities. Nonetheless, university libraries face several challenges that affect functional electronic resources sharing. The greatest challenges is lack of knowledge about benefits of e-resource sharing, indifferent attitude of librarians toward e-resources sharing initiatives.

Recommendations

Based on the research findings, the study recommends the following:

1. There is need for e-resource sharing policy in university libraries. This will assist and guide librarians in sharing of e-resouces.

2. There is need to provide instrasturcture/resources that facilitates e-resource sharing in university libraries.

3. There is an urgent need for intensive sensitization of librarians / heads of libraries on the need to share available e-resources. This will serve as a wake up call and also empower librarians to appreciate the benefits inherent in e-resource sharing.

Practical implications

The findings of this study can be used as basis for further study in other geographical zones in Nigeria and developing countries in Africa. The findings of this study may also be used by university librarians in determining the best strategies to adopt. Also, the findings has brought to lime light the need for e-resources sharing policy (ESP) in university and related academic libraries.

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