

STRATEGIES FOR OVERCOMING THE CHALLENGES OF ELECTRONIC RESOURCES COLLECTION DEVELOPMENT IN UNIVERSITY LIBRARIES IN SOUTH-EAST NIGERIA.

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ABSTRACT

This paper examined the challenges and strategies for overcoming the challenges of electronic resources collection development in university libraries in Southeast Nigeria. This study employed a descriptive survey design with population of 86 librarians in collection development, serials and digital library. The survey used questionnaire and interview as instruments for data collection. Data collected were tabulated and analyzed using simple statistics of percentages and mean. The findings showed that the university libraries employ various strategies in overcoming the challenges of electronic resources collection development, and the overall mean showed that an increase in the library budgets (mean = 3.36) is ranked highest and are applied mostly by the libraries, while the selectors should devise a means of applying statistics to a cancellation decision (mean = 2.92) is ranked lowest as strategies employed by university libraries in enhancing electronic resources collection development. The study revealed twelve strategies with an increase in the library budgets as a major strategy in enhancing electronic resources collection development. The study recommended that the university libraries in Southeast Nigeria should provide adequate funds to the libraries; make alternative provision of electricity/power in the provision of energy needed for building electronic resources; should train and retrain their staff on the technical skills; training on the areas of software and hardware troubleshooting in developing electronic resources collection. That the university libraries should train the librarians on business and negotiation skills that will enable them understand the integrity of the licensing and negotiation involved in the subscription of electronic resources.

Keywords: Electronic resources, collection development, University Libraries, Strategies of electronic resources

Introduction

With the emergence of Information and Communication Technology (ICT) in the 21st century, the university library system has witnessed a tremendous increase in information in electronic form and the needs of the library users have changed towards electronic resources. As such, it becomes pertinent that the university libraries should build their resources with electronic resources in order to meet with the information needs of the library users. University library is defined by Reitz (2004) as a library or library system established, administered, and funded by a university to meet the information, research, and curriculum needs of its students, faculty, and staff. The university libraries are established to provide information materials to actualize the aforementioned functions of the university.

University library acquires collections in broad terms of quantity and quality in the form of prints and electronics to support the teaching, learning, research and recreational purposes, (Weber and Flatley 2008). These resources include books, journals, abstracts, audio and video CDs and other electronic resources such as databases, online databases, webresources, e-journal, e-books which have been introduced by the emergence of Information and Communication Technology (ICT). University libraries as service organizations exist to achieve the objectives of their parent institutions that established them.

Electronic resources are described by International Federation of Library Association (IFLA) (2012) as those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile devices. They may be accessed remotely via the internet or locally. In considering the advantages of electronic resources, Mansur (2012) reiterated that electronic resources are pertinent because of their easy usability, readability, budgetary aspects, speedy accessibility and easy back files access. Furthermore, electronic resources have become very important these days as they are up-to-date, multi-dimensional and directional in nature and also can be accessed as well as used anywhere, crossing all geographical boundaries. Such resources add value to all spheres of human activities. Sharma (2009) submits that the importance of electronic resources have convinced many libraries to move towards digital electronic resources, which are found to be less expensive and more useful for easy access.

The effective collection development of electronic resources has some challenges which are most common in the underdeveloped countries. Libraries in the developing countries are challenged by a lot of factors which range from poor funding, poor communication system, lack of Information and Communication Technology and qualified librarians. Yacob in Obidike (2015) revealed that inadequate computerization, inadequate infrastructure, and inadequate human capacity were some of the major challenges towards the use of ICT in an educational institution in Botswana. This situation is not different in university libraries in Nigeria especially university libraries in Southeast Nigeria where library operations are manually carried out and the libraries are technologically inadequate to abreast the emergence of new collection development operations. Therefore this study assesses the possible strategies for overcoming the challenges of electronic resources collection development in university libraries in Southeast Nigeria.

Statement of The Problem

The emergence of Information and Communication Technology (ICT) has brought about tremendous development in university libraries operations especially in the development of electronic resources. The university libraries are gradually shifting from the traditional library system to electronic in order to attain to the information needs of their library users. The processes of building electronic resources are slightly different from prints that involve the use of internet network and power supply. It has been observed that university libraries in South East Nigeria encounter challenges of power, poor network access, insufficient fund to subscribe and renew the subscriptions, training of qualified staff and poor internet access as a result of poor network and the likes in the course of building these electronic resources. Therefore this study sets to assess possible strategies of overcoming the challenges of electronic resources collection development in university libraries in Southeast Nigeria.

Objectives of The Study

The purpose of the study is to examine the possible strategies of overcoming the challenges of electronic resources collection development in university libraries in Southeast Nigeria. The specific objectives of the study are

1. To determine the challenges of electronic resources collection development practices in university libraries in Southeast Nigeria; and
2. To identify the strategies for enhancing electronic resources collection development practices in university libraries in Southeast Nigeria.

Research Questions

Two research questions derived from the objectives of the study were formulated to guide the study:

1. What are the challenges of electronic resources collection development practices in university libraries in Southeast Nigeria?
2. What strategies enhance electronic resources collection development practices of university libraries in Southeast Nigeria?

Review of Related Literature

Electronic resources

Electronic resources are concepts which evolved as a result of the rapid growth of information and communication technology. It has been described by different authors in different ways. Shukla and Mishra (2011) described the electronic collection as the collection of information which can be accessed only by the use of electronic gadgets. International Federation of Library Association (IFLA) (2012) described electronic resources as those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile devices. They may be accessed remotely via the internet or locally.

Similarly, Mansur (2012) described electronic resources as electronic products that deliver a collection of data, be it text referring to full text databases, e-journals, e-books, image collections, other multimedia products and numerical, graphical or time based, as commercially available title that has been published with a sole aim of being marketed and for information dissemination. These may be delivered on an optical media or via the Internet. Graham (2003) sees electronic resources as the mines of information that are explored through modern Information and Communication Technology (ICT) devices, refined and redesigned and more often stored in the cyberspace in the most concrete and compact form and can be accessed simultaneously from infinite points by a great number of audience. The phrase electronic resources has broadly been defined as, information accessed by a computer, may be used as bibliographic guides to potential sources but, as of yet, they infrequently appear as cited references in their own right. E-resources, therefore, refer to that kind of documents in digital formats which are made available to library users through a computer-based information retrieval system.

In describing the concept of electronic resources, Bavakenthy, Veeran, and Salih (2003) viewed electronic resources as resources in which information are stored electronically and are accessible through electronic systems and networks. „E-resource' is a broad term that includes a variety of publishing models, including Online Public Access Catalogues (OPACs), CD-ROMs, online databases, e-journals, e-books, internet resources, Print-on-demand (POD), e-mail publishing, wireless publishing, electronic link and webpublishing, etc. In this context, the term primarily denotes "any electronic product that delivers a collection of data be it in text, numerical, graphical, or time based, as a commercially available resource". According to Tsakonas and Papatheodorou (2006), electronic information resources are information resources provided in electronic form, and these include resources available on the Internet such as e-books, e-journals, online database, Compact Disk Read Only Memory (CD-ROM) databases and other computer-based electronic networks, among others.

Collection Development

Collection development has become a very popular term in library and information centers as a need for an efficient and balanced collection. Zijl (1998) sees collection development as the selection, maintenance, acquisition and evaluation of information sources in libraries. Mosher (1982) observed that collection development is a process that should constitute a rational documented program guided by written policies and protocols and should reflect, in a sense, a contract between library users and staff as to what will be acquired, for whom and at what level. Collection development as defined by Seetharama and Ambuja cited by Igiomoh

and Duro (2012) is a communication tool for management, librarians, users and other libraries; a detailed outline of collecting levels; a description of collection development responsibilities; and budgeting tool that helps librarians decide where to place resources. Furthermore, Elaturoti (1995) sees collection development as the process of assessing the strength and weaknesses in a collection and then creating a plan to correct the weakness and maintain the strength.

Gabriel (1995) defined collection development as a term representing the process of systematically building library collections to serve study, teaching, research, recreational, and other needs of library users. According to Mansur (2012), collection development is the selection, acquisition, and processing of library materials in varied formats meant for users' current needs and their future requirements. He further highlighted the process of collection development to include selection and deselection of current and retrospective materials, planning of coherent strategies for continuing acquisition, and evaluation of collections to ascertain how well they serve users needs.

Collection development is a well-planned activity for which a well-defined policy is essential; it is a vital process in creating and building a library collection. It is applicable to all types of library (Barik and Shethy in Igiamoh and Duro 2012). International Federation of Library Association (IFLA 2010), Rowley and Black (1996) believe that the aim of collection development is to carry out a library's mission to create a repository or gateway to information for scholars today and to capture the intellectual heritage of the prevailing culture in order to benefit future learners and thinkers.

Challenges of Electronic Resources Collection Development in Libraries

Electronic resources present a number of challenges not encountered with the selection and acquisition of traditional analog materials. Yu and Breivold (2008) revealed that with the various types of e-resources such as electronic books, electronic journals, reference sources, and full text databases, each one is unique and is considered separately during selection process. Selection criteria for e-resource pose challenge to the librarians. In case of print material they have to evaluate the price, contents, layout etc. But in the case of e-resources the librarian has to assess its subject relevance, authenticity of information, its usage and accessibility, pricing, vendor reputation, and many more technical factors, reiterated Benny (2015).

Similarly, Yu and Breivold (2008) observed that the discovery of e-resources is challenging due to a rapid increase in the availability of e-resources. Selection of an e-resource requires more interaction between various library departmental staff, such as technical services for legal and access issues, technology for compatibility, and reference/public services for training and ease of use, hence waste a lot of time. Also the negotiations between library purchaser and licensor vendor can be time-consuming and complex.

The challenges of electronic resources collection and management in libraries are the problem of user training, technological up-grading, financial constraint, IT skill manpower, perishable citation: online, if website changes, Universal Resource Locators (URLs) citations disappear, authentication, etc. (Behera & Singh 2011, Balangue 2012). Similarly Dhanavandra & Tamizhchelvan (2012), observed insufficient bandwidth which usually leads to network fluctuation and sometimes slow speed in the process of downloading resources. Also Chisenga (2004) reported that lack of funds, lack of qualified ICT personnel, erratic power supply led to the non-availability and under-use of ICT facilities resulting in low ECD standard.

There is lack of perpetual access to e-resources. A majority of e-resources is licensed for a limited time reiterated Yu and Breivold (2008). Thus, at the end of the license period, if

the selector decides to cancel the subscription, it results in a loss of access to the content. It is critical to check access to the resource on regular basis and follow up with the provider in the case of loss of access, which requires special staff having technical skills and knowledge.

In a related development, the content of the resources may change over time and require periodic review by the selectors. This requires a continuous evaluation process by the selectors, which is a time consuming job. Duplication and availability of content from various sources add confusion to users as well as to the selectors.

Furthermore, Agim (2015) disclosed that inadequate budget adds challenges for selectors in making decisions for renewal of e-resources. Budgetary allocation to the educational sector in Nigeria has always fallen far short of expectation. This affects the ability of Nigerian tertiary institutions to cope with the fast growing trends in electronic resources acquisition. Most libraries do not systematically receive additional funding to maintain and develop electronic collections; it becomes difficult to add new resources within limited budgets. Goehner (1992) compares the costs involved in the acquisition of printed document and their counterpart in electronic format. He says that it costs heavily in the initial stages to install the hardware and software to make full advantage of electronic resources.

As more and more of a library's acquisitions budget is devoted to e-resources, selectors often have to curtail the purchase of monographs or cancel some print subscriptions. Due to an increase in the demand of users for e-resources, selection becomes more user-driven.

In addition, Abbey (2001) reiterated that the greatest problem in acquiring proprietary electronic resources is that libraries seldom if ever acquire them outright. Rather, they enter into licensing agreements that grant term-limited access to them. He further revealed that given the high prices of many of these sources, librarians must spend increasing amounts of time on the economics of acquisition and licensing rather than on content issues. Another problem observed by Abbey (2001) is difficulty involved in the track of the use of e-resources to determine their value for current patrons. Because libraries do not archive electronic resources, only current users can be considered. One does not consider the future research value of e-journals in the same manner as one considers that of print serials.

According to Vashishth (2011), the main problems in building collection in e environment are quotation system, cost factor, rate of library discount, unorganized book trade and reminder books. He also pointed out that lack of ICT infrastructure, inadequate collection, and lack of mechanism for training library personnel are other major problems being faced by librarians. Johnson (2009), reiterated that selection and acquisition of e-resources add complexity to the interactions of collection librarians and acquisitions staff for many reasons. Many e-resources are expensive and may require special approval processes.

Strategies for Overcoming the Challenges of Electronic Resources Collection

Electronic resources can be enhanced through the use of Information and Communication Technology. According to Haliso (2011), Information and Communication Technologies (ICTs) enhance service provision to library clientele. Obidike and Mole (2015) suggested that provision of adequate funds, computerization/full automation of the university library, constant power supply, training of librarians and paraprofessionals in the use of modern ICT facilities and creation of higher Internet bandwidth for effective Internet connectivity among others form the strategies for enhancing the electronic resources collection development practices in university libraries in South East Nigeria.

In addition, IFLA (2012) suggested that libraries should develop a supplementary policy which addresses specific format related issues. Such a policy should be used in conjunction with more traditional collection development policy and not in isolation. Librarians who deal with licensing agreements should have negotiating skills and required to

work collaboratively with the institution's legal counsel. They should be familiar with the policies of their institution. Some libraries have tried to isolate the licensing process to free up more staff time for mission-related work.

Furthermore, Yu and Breivold (2008) suggested that in order to retain access to the materials for which payment has been made after cancellation, libraries should ask or seek for archival access if it is not included in the contract. The content providers should agree to provide usage statistics for e-resources. The data should be compliant with Counting Online Usage of Network Electronic Resources (COUNTER), which helps libraries to compare usage statistics and make informed decisions for renewal or cancellation of e-resources reiterated, Yu and Breivold (2008).

Staff training has been so paramount in organizational development, Mansur (2012) observed that developments in the e-resources market & technology are happening so fast, that there is a need for continuous staff training & professional development among librarians and computing specialists. According to Haliso (2011), training the academic librarians and other paraprofessionals to appropriate skills and use of Information and Communication Technologies is very vital.

More so, the library should establish its system capacity and performance requirements. Capacity requirements determine the quantity of data that a system needs to handle observed Mutual and Makondo, (2003). They noted that many libraries have purchased systems that are adequate files or increasing levels of activity reach the system capacity. Therefore, the library should ensure the system to be purchased will be compatible and accommodate the future acquisition of electronic resources. They suggested a variety of tools that can be used to make the sound selection decision. They include trial offers and demonstrations from publisher /vendor, faculty /patron suggestions, discussion lists, peer library websites and vendor exhibits at conferences.

Research Methodology

The study was a descriptive study that examined the strategies for overcoming the challenges of electronic resources collection development of government-owned university libraries in Southeast Nigeria established before 2010. These strategies will enhance a smooth development of electronic resources in university libraries in Southeast Nigeria. The study covered the University of Nigeria Nsukka, Federal University of Technology Owerri, Nnamdi Azikiwe University Awka, Michael Okpara University of Agriculture Umuahia, Enugu State University of technology, Abia State University, Uturu, Imo State University Owerri, Anambra State University (Chukwuemeka Odimegwu Ojukwu University) and Ebonyi State University, Abakaliki. The study was conducted in four federal government and five state government-owned university libraries using questionnaire and structured interview as instruments of data collection.

The respondents were all the librarians in collection development, serials, and e-library (digital libraries). All the 86 librarians of the e-library, serials and collection development units in the state and federal universities libraries in South East Nigeria were used for this study. All the librarians were used since the number was manageable. The questionnaire items were administered and collected personally by the researchers to ensure maximum return and correctness by visiting the units of the university libraries used for this study. Data collected were tabulated and analyzed using simple statistics (mean).

Research Question 1: What are the challenges facing electronic resources collection development practices in university libraries in the South East Nigeria?

The data providing answers to the above research question are presented in Table 1 below.

The above table shows the responses of the respondents on the twelve (12) identified items of strategies libraries employ to overcome the challenges of electronic resources collection development had mean values ranging from 2.92 to 3.36 which are all above the cut-off point of 2.50 on a 4-point rating scale. The above findings indicated that the respondents agreed that all the twelve (12) identified items could be used as strategies that the libraries can employ to overcome the challenges of electronic resources collection development practices.

The top on the list was increase in budgets of the university libraries which has a highest mean of 3.36 ranked highest, while Selectors should devise a means of applying usage statistics to a cancellation decision was the lowest with mean value of 2.92 as strategies your library employs to overcome the challenges of electronic resources collection development.

The interview responses from the nine university libraries studied revealed that tackling erratic power supply, increasing the internet bandwidth, forming a consortia where university libraries will be able to pay and access electronic resources/materials from the internet, and provision of adequate funds to the library management for procurement of computers and other modern ICT equipment and adequate training of staff on technical skills in electronic resources collection were some of the strategic measures of enhancing electronic resources collection development challenges in universities in South East Nigeria. The university library should solicit for funds from the university on time in order to meet the deadline of the subscription renewal to ensure perpetual access to the electronic resources.

Summary of The Findings

The findings of this study on research question one (1) revealed the challenges encountered by the university libraries in building electronic resources. They include the discovery of e-resources due to the rapid increase in the availability of resources, difficult to check access to the resource on regular basis, difficult to follow up with the provider in the case of loss of access, special staff having technical skills are required, there is lack of perpetual access to e-resources, duplication and availability of content from various sources add confusion to users as well as to the selectors, periodic review by selectors is time consuming, continuous evaluation process by the selectors is a time consuming job, librarians spend increasing amounts of time on the economics of acquisition and licensing rather than on content issues, problem of how to apply usage statistics to cancellation decisions, poor network access, cost of acquisition. These findings are in agreement with the study carried out by Behera and Singh 2011, Yu and Breivold (2008) on the challenges of electronic resources collection and management in libraries which are the problem of user training, technological up-grading, financial constraint, perishable citation and lack of perpetual access.

The findings on the cost of acquisition is in agreement with the study by Goehner (1992) who compares the costs involved in the acquisition of printed document and their counterpart in electronic format. He says that it costs heavily in the initial stages to install the hardware and software to take full advantage of electronic resources. The findings on cost of acquisition agreed with the works of Mansur (2012) who observed that the developments in the e-resources market and technology are happening so fast, that there is a need for continuous staff training and professional development among librarians and computing specialists.

These findings are in agreement with the study by Vashishth (2011), who emphasized that the main problems in building collection in electronic environment are quotation system, cost factor, rate of library discount, unorganized book trade and reminder books. He also pointed out that lack of ICT infrastructure, inadequate collection, and lack of mechanism for training library personnel are other major problems being faced by librarians.

The findings of this study are in agreement with the work of Chisenga (2004) on the use of ICT in ten Anglophone African public libraries. His findings reported that lack of funds, lack of qualified ICT personnel, erratic power supply led to the non-availability and under-use of ICT facilities resulting in low electronic collection development standard. The finding of this study also supported the works of Mole & Obidike (2016) whose work revealed that inadequate funding for automation which is also at infancy level, poor technical knowhow, lack of higher bandwidth in Internet connectivity and lack of sound administrative policies and guidelines as challenges of electronic resources collection development practices.

The interview responses from the nine university libraries studied also stated that low internet bandwidth, poor funding, inability of most library staff to use computers and epileptic power supply were some of the factors militating against electronic resources collection development practices in university libraries. The low internet bandwidth is connected with poor funding.

Electronic resources collection development should not be seen from the platform of the prints as it is complex and requires much time to understand the licensing policies and other related information concerning the electronic resources collection development practices.

The findings of this study on research question two revealed the strategies university libraries in Southeast, Nigeria adopted to overcome the challenges of e-resources collection development practices. They include; effective control on the rapid increase in the available resources, library should devise a means of checking access to the resource on regular basis, library should follow up with the provider in the case of loss of access, selectors work in teams and cooperate with other libraries, training of staff on technical skills and knowledge to check access to the resource on a regular basis, renewal of subscription before expiry of payment made to avoid loss of access to the e-resources, ensure availability of content from one major source to avoid confusion to users as well as to the selectors, selectors should review the evaluation process to consume less time, librarians should spend less time on economies of acquisition and license and more on the content issues, selectors should devise a means of applying usage statistics to a cancellation decision, improvement on network access and increase in the library budgets. This position supported the works of Yu and Breivold (2008) who revealed that in order to retain access to the materials for which payment has been made after cancellation, libraries should ask or seek for archival access if it is not included in the contract.

The content providers should agree to provide usage statistics for e-resources. The data should be compliant with Counting Online Usage of Network Electronic Resources (COUNTER), which helps libraries to compare usage statistics and make informed decisions for renewal or cancellation of e-resources reiterated, Yu and Breivold (2008).

According to Mansur (2012), developments in the e-resources market and technology are happening so fast, that there is a need for continuous staff training and professional

development among librarians and computing specialists. Training of staff on technical skills and knowledge to check access to the resource on a regular basis was also identified as a strategic measure of enhancing electronic resources collection development in university libraries in South East Nigeria. According to Haliso (2011), training the academic librarians and other paraprofessionals to appropriate skills and use of Information and Communication Technology is very vital. Training can come in many forms but the most important and cost-effective one is training on the job. It is advisable to have on a regular basis in-house training among the library staff and libraries should endeavor to have a standing policy on staff training.

The interview responses from the nine university libraries studied also revealed that tackling erratic power supply, increasing the internet bandwidth, forming a consortia where university libraries will be able to pay and access electronic resources/materials from the Internet, and provision of adequate funds to the library management for procurement of computers and other modern ICT equipment and adequate training of staff on technical skills in electronic resources collection were some of the strategic measures of enhancing electronic resources collection development challenges in university libraries in South East Nigeria. Adequate funding should be made available to libraries for the training of library staff so as to be efficient in understanding the complex licensing policies involved in electronic resources collection development practices.

Conclusion

In building electronic resources in university libraries especially in the information and communication age, there existed some challenges. To overcome this, some strategies have been proffered to enhance electronic resources collection development in university libraries in Southeast Nigeria. These include effective control of the rapid increase in the available resources, library should devise a means of checking access to the resource on regular basis, library should follow up with the provider in the case of loss of access, selectors work in teams and cooperate with other libraries, training of staff on technical skills and knowledge to check access to the resource on regular basis, renewal of subscription before expiry of payment made to avoid loss of access to the e-resources, ensure availability of content from one major source to avoid confusion to users as well as to the selectors, selectors should review the evaluation process to consume less time, librarians should spend less time on economies of acquisition and license and more on the content issues, selectors should devise a means of applying usage statistics to a cancellation decision and improvement on network access.

Recommendations

In the light of the present study, the following recommendations are made for smooth collection development of electronic resources in university libraries in Southeast Nigeria.

- The university libraries in Southeast Nigeria should provide adequate funds to the library.
- The provision of adequate fund will necessitate the subscription of better network for improved access to electronic resources.
- The provision of adequate fund will also encourage timely renewal of electronic resources to avoid loss of access to the electronic resources
- The university libraries in Southeast Nigeria should make alternative provision for electricity/ power supply to support the libraries in the provision of energy needed for building electronic resources.

- Libraries should train and retrain their staff on the technical skills. This is needed in order to handle any technical problems that may arise when handling electronic resources. Training on the areas of software and hardware troubleshooting in developing electronic resources collection.
- The university libraries should train the librarians on business and negotiation skills that will enable them to understand the integrity of the licensing and negotiation involved in the subscription of electronic resources.
- The librarians should follow up with the provider to avoid losing access to electronic resources if not renewed at expiry.
- The selectors should devise a means of applying usage statistics to a cancellation decision.
- Increase in the internet bandwidth in order to improve the network access to electronic resources on regular basis.

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