

MANAGEMENT OF ELECTRONIC RESOURCES IN NIGERIAN UNIVERSITY LIBRARIES

BY

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Abstract

The study explored management of e-resources in Nigerian university libraries in South-South, Nigeria. The population and sample consisted of 290 librarians. Data were collected through questionnaire. A total of 212 (73.1%) copies of valid questionnaire were used for the analysis. Data were analyzed using frequency counts and simple percentages. The study revealed that licensing of e-resources and expertise are required in managing e-resources, planning and policies serve as guidelines for e-resources management, and inadequate personnel to handle e-tools was the major problem militating against the management of e-resources in the university libraries. The study concluded that formulation of policies on e-resources management; training and retraining of staff would enhance e-resource management.

Keywords : Management, E-resources, Librarians, Libraries, Nigeria

Introduction

Over the past few years, libraries and information centers have been affected by changes in information technology, and the rate of changes is still accelerating in this era. Information technology is now able to create: (i) new products, processes and create machines that can be used independently, customized information packages, video cassettes, home information products, personal computers and reprographic equipment (ii) external dependents, database online information system (iii) joint library information networks and (iv) electronic information processing system such as the electronic book. Information technology has been able to reduce time and space in communication. In order to manage the present growth in information technology, libraries are now adopting different electronic resources for its acquisition to fulfill the desire of different clients in a better way. However, to attain the goals of an ideal information system there is a need to select, assess and manage the e-resources in the best possible way to provide adequate access, both to the clients and the personnel for its at all times (Devi & Devi, 2010).

As libraries put together collections of electronic materials, looking for ways to organize them professionally becomes a key challenge. The number of e-journals, citations databases, and full text aggregations by most libraries have developed speedily. Organizing these e-resources involves providing the library patrons with suitable ways to find and access them and providing library personnel with the tools to keep track of them (Breeding, 2004).

Bothmann and Holnberg (2006) stated that e-resource management may be seen in diverse ways. The definition may be as narrow as an A-to-Z list of serial titles, or a broader idea like a content management system used to generate web pages, provide managerial functions, and track license agreements.

The steps needed for managing e-resources are more difficult than those for print materials. A procedure that consisted of selecting, ordering, sorting and binding, now includes selecting, evaluating, approving, licensing, billing and registering access (Kumari, 2015). This is

accompanied by a sequence of technological aspects, such as usability, performance, access technologies, society interfaces, troubleshooting and practice information. Electronic resource management is time demanding and interactive process, often requiring more time with a better skill set at each phase (Kasprowski, 2006).

As libraries are experiencing transformation in terms of digital content and delivery, librarians must know what is going on in their organizations and how best to staff them. They are increasingly turning to established business practices that permit them to assess and plan new methods of delivery of resources and services. Process mapping, perhaps has a future in libraries, especially since it allows library staff to handle difficult processes such as electronic resource management (ERM). Periodical of other case studies and discussions of process mapping within the library community may lead to enlarged implementation of these models and methods (Afifi, 2008).

Statement of the Problem

Explosion of digital products and transforming modes of access have made management of electronic resources a complex and difficult task. Management has become a pressing issue and of interest for librarians all over the world as they realise the need for good management of e-resources for easy and quick dissemination of information to their users. University libraries in south- south Nigeria just like other libraries in other parts of the country are established primarily to meet the information needs of their user communities through acquisition and management of electronic materials to support teaching, learning, research and dissemination of information. For these materials to serve the purpose for which they are acquired, there is the need for proper management for easy access. However, some of these electronic information resources available in South- South university libraries are not well managed due to several factors and this can obstruct users from accessing them. It is in the light of the above that this study is carried out.

Objectives of the Study

The study sought answers to the following objectives:

- 1.To identify the various ways of managing electronic resources in Nigerian university libraries;
- 2.To ascertain the strategies for managing electronic resources in university libraries; and
- 3.To identify the various problems militating against management of electronic resource.

Research Questions

The study was guided with the following research questions:

- 1.What are the various ways of managing e-resources in Nigerian university libraries?
- 2.What are the strategies of managing electronic resources in Nigerian university libraries?
- 3.What are the problems militating against the management of electronic resources in university libraries?

Literature Review

Managing a collection of e-information resources varied from managing a collection of non-electronic information resources. Unlike a printed book, computer and networks are required to access electronic information. Personnel with special skills must be involved; and users' skills and desires are central factors. Library choices are prejudiced as forced by the advertising strategies, pricing and knowledge options obtainable by the information vendors. Various libraries making choices from the same accessible options can and will end up with considerably diverse solutions (Bellary & Surve, 2019).

Bothmann and Holmberg (2006) stated that the development and use of policies is critical in electronic resource management and for communicating a library's goals. Policies, set guidelines of practice and aid in electronic resource management. Apart from collection development policies, libraries need policies that address issues such as types of resources to support selection, licensing issues, and user access. Other policy matters include how and which resources should be catalogued, placed in a content management system or subject guide, or added to an electronic resource management system (ERMS). Also, planning for electronic resources is perhaps the most significant practiced activity in libraries. Electronic resources present a number of traditional library operations and workflow that must be addressed in order to provide even management. The problems faced by various libraries comprise of issues such as the number of staff assigned to electronic resource management duties, how to come to term with technical and vendor changes in electronic resources, budgeting, inadequate resources for the acquisition of resources, and communication with vendors and among librarians and administrators. Also publishers who have evolved into the electronic resource environment from time to time initiate problems as they lack understanding of the access requirements of libraries. For example Universal Resource Locator (open URL) and Internet Provider (IP) authentication. Couple with these issues is constant mistrust on both sides.

Kumari (2015) argued that electronic materials in a college and research library is a key subject of debate amongst the university setting. Every university library is accepting electronic collections, because digitization is in vogue, but a few of the libraries accept it as a technique. Electronic resources have turned out to be standard resources in university libraries in the last few decades. Today acquisition of journals, magazines and other secondary resources are intensely slanted in the direction of digital. With the advent of electronic materials, the usual libraries are gradually moving from distribution of print materials to electronic materials which has given access to information that were considered tricky to access and this has compelled libraries to rethink about their collections (Devi & Devi, 2010).

Emery, Stone and McCracken (2020) also stated that staffing for electronic resources management is perhaps the biggest challenge most libraries face. The researchers acknowledged that some libraries address the challenge of limited employment by distributing work among available employees, prioritizing projects according to staff accessibility, and emphasizing the need to put in more staff time in the electronic resource environment. Others have developed a team structure to meet the staffing need and delegating specific tasks to paraprofessionals. A lack of realistic expectations of what one electronic resource librarian can do with the large number of resources and vendors, as well as the verification, bibliographic control and access questions, and overall management for purchases, renewals, and license tracking.

According to Joshipura (2008), once the resource is identified, evaluation of the product is the second most critical step for selectors. Evaluation helps the selectors determine the cost, the reliability of the content provider, and most importantly the authoritativeness of the resource. A selection tool such as a trial or demonstration of the product by the provider, as well as reviews in print and electronic sources, helps in evaluating the product and leads to sound decisions. Traditionally, with print resources, the selectors consider the credentials of the author, currency, proposed viewers, accuracy, ease of use, reputation of the publisher, the subject, its cost and the curriculum or research needs of students/faculty/clientele. They also use methods such as citation analysis, user surveys, and so forth. However, with e-resources the selector must consider additional elements such as easy access to the content, coverage, search capability and functionality of the interface; quality of technical support; method of

pricing; and provisions of licensing agreements. Thus, the typical evaluation process for e-resources has many facets, and following the various selection criteria is vital for selector.

According to Poe, Bevis, Graham, Bethany and Stevens (2008) management of electronic resources is time-consuming and, at times, a difficult process. Although the management of electronic resources is frequently seen as a technological services attempt, it should be considered a versatile process requiring all areas of the library. The management of electronic resources begins in the technological services area, particularly, acquisitions, where the bulk of the resources compilation starts.

Okoye and Ugwuanyi (2012) observed two basic aspects to managing electronic resources: back end acquisition functions and a front-end content delivery. Back end (managing the business details connected to acquisition, payment, and licensing). Front- end (details of delivering the content to library users), is achieved through:

- i. Provision of online catalogues
- ii. Connection and cross probing. In this scenario, Z39.50 protocol is a main ability.
- iii. Cross-searching substitute which engages the use of open archive procedure for Metadata Harvesting (OAI-PMH).
- iv. Use of E-journal locator resources
- v. Linking to full text is possible through the use of digital object identifiers (DOI) that can be used to provide links to full text
- vi. Open URL-Based link resolvers

Some major linking products available include:

- SFX from Exlibris
- Link source from EBSCO
- Link finder plus from Effort Information Systems
- Web bridge from inventive interfaces
- Sirsi resolver from Sirsi Corp
- Editorial finder from serials solutions
- Icate from Openly Informatics (Okoye & Ugwuanyi , 2012).

- vii. Federated search

This involves applications that permit users to search multiple sources concurrently, so they do not have to decide which material may have the information they require. This approach is also known as cross probing or meta exploration. Some of the key products in this group include:

- Encompass from Endeavour Information Systems
- Metalib from Exlibris
- Sirsi single search from Sirsi
- Webfeat prism from webfeat
- Muse search from Muse Global
- ZPORTAL from Fretwell-Dowing
- Verde from Exlibris (Breeding ,2004).

Okoye and Ugwuanyi (2012) submitted that management of business details of back-end staff functions, relates to acquisition payment and licensing. The traditional online catalogue advance depicts the back-end management tool for library staff. In this respect, the integrated library system (ILS) is used to manage e-journals and other electronic content. However, the ILS lacks some of the required features, mainly due to its orientation towards print materials. The lack falls within the parameters of licensing. With electronic resources, the library signs a license for each electronic resource, be it for a simple title or more often for a large aggregation of materials such as: PROQUEST, EBSCOHOST and Web of Science. Licensing of e-resources involves a number of information such as the cost, the period of the license, when desired to be renewed, the number of immediate clients permitted and whether the library

retains right of entry to the material or not. Others are, the phone number to call for mechanical support and whether one is permitted to use the material to complete an inter library loan request. Electronic resources management (ERM) was developed to conquer these limitations.

Methodology

The study examined management of e-resources in university libraries in South-South, Nigeria. The distribution of the questionnaire in the university libraries is as presented in the table below. Copies of twenty-item questionnaire constructed were used for data collection. 290 copies of the questionnaire were circulated to the and 212 (73.1%) were returned and found usable. Information collected were analyzed using frequency counts and percentages.

Table 1: Population of the Study

Delta State University Library, Abraka	28
University of Benin Library, Benin City	42
Ambrose Alli University Library, Ekpoma	25
University of Calabar Library, Calabar	17
University of Port-Harcourt Library, Port-Harcourt	33
River State University of Science and Technology Library, Port-Harcourt	10
Cross River State University Library, Calabar	34
University of Uyo Library, Uyo	53
Akwa Ibom State University Library, Akwa Ibom	8
Federal University of Petroleum Library, Effurun	5
Niger Delta University Library, Amassoma	35
Total	290

Table 2: Questionnaire Distribution and Return Rate

Copies Administered	Copies Retrieved and Used For Analysis	Percentage Retrieved
290	212	73.1%

Table 3: Gender of the Respondents

Male (%)		Female (%)	
120	56.6%	92	43.3%

Table 3 shows that majority of the respondents were male.

Table 4: Age of the Respondents

Age	Frequency	Percentage
25 – 30	21	9.90%
35 – 40	95	44.8%
45 – 50	61	28.7%
55 – 60	35	16.5%

Table 4 shows that majority of the respondents were between 35-40 years old.

Table 5: Educational Qualification

Educational Qualification	Frequency	Percentage
Ph.D	15	7.07%
MSc/MLS	79	37.2%
BLS	51	24.0%
Dip	67	31.6%

Table 4 shows that 79 (37.2%) of the respondents are MLS/ MSc holders.

Table 6: Designation of the Respondents

Designation	Frequency	Percentage
Assistant Librarian	97	45.7%
Librarian II	49	23.1%
Librarian I	36	16.9%
Senior Librarian	21	9.90%
Deputy Librarian	9	4.24%

Table 6 shows that most of the staff- 94 (45.7%)- were Assistant Librarians.

Table 7: Electronic Resources Management

Management of e-resources management	Freq.	%
Librarians are completely involved in managing e-resources	21	9.90
Licensing e-resources are necessary	52	24.5
Managing e-resources is the same as managing print resources	9	4.24
Electronic resources are easier to manage than print resources	4	1.88
Experts are required to manage e-resources	45	21.2
Anyone can manage e-resources	19	8.96
Management of e-resources is essential	20	9.43
E-resources are not compulsory in the library	2	0.94
In-service training is obligatory	35	16.5
Parent body's input is mandatory	5	2.35

Table 7 shows that 52 (24.5%) of the respondents agreed that licensing of e-resources is necessary. A total of 45 (21.2%) of them stated that experts are required in managing e-resources. While 35(16.5%) indicated that in-service training is essential in managing e-resources. To the respondents, this would enable the staff to update their knowledge and skills of e-resources management. This findings agreed with Nihar (2017) which stated that unlike print publications, e-resources purchased is not the end of it all, it frequently require a license agreement to be in place. Prior to the buying of e-resources, the license must be reviewed and negotiated to inform and support the assessment procedure, and to make sure that it reflects the selectors expectation. Where possible, it is preferable to get, a typical model license agreement that describes the rights of the library in clear words. The license should, as much as possible, defined – Authorized Users and – Authorized Sites’. The study is also in line with the study of Kumari (2015), that software subject to licensing must be properly licensed and all license provisions (appropriateness, utilization, repetition, number of simultaneous clients, terms of the licenses, etc.) must be firmly adhered to.

Table 8: Electronic Resources Management Strategies

Strategies of Managing E-resources	Freq.	%
Assessment of e-resources is necessary	8	3.77
Staff training have positive effect on management of e-resources	81	38.2
There is need to create a committee of individual to look at choices for a particular resource	2	0.94
Accurate examination of staff and reassignment of duties are necessary	25	11.7
Planning and policies serve as guidelines for the management of e-resources	96	45.2

Table 8 shows that 96 (45.2%) of the respondents indicated that planning and policies serve as guidelines for the management of e-resources, because this will assist librarians in managing these resources successfully. Eighty one (38.2%) of the respondents opined that, staff training have positive effect on management of e-resources. The resultant effect is that, this would help librarians know the diverse ways of handling essential educational resources. From Table 8 it is evident that 25(11.7%) of them stated that accurate examination of staff and reassignment of duties are essential, as this will make the librarians to be more careful and serious with their jobs. Only 2 (0.94%) of the respondents agreed that there is the need to create a committee of individuals to look at choices for a particular resource. From the analysis it was discovered that planning and policies are the most strategic ways in which e-resources can be managed. The findings is in line with Bothmann and Holmberg (2006) who posited that, policies set guidelines of practice that assist in electronic resource management. Apart from collection development policies, libraries need policies that address issues such as types of resources to support selection, licensing issues, and user access. Other policy matters include how and which resources should be catalogued, placed in a content management. Also, planning for electronic resources is perhaps the most significant and skillful activity in libraries. Electronic resources present a number of challenges to the traditional library operations and workflow that must be addressed in order to provide adequate management. The study is also in agreement with the findings of Elly, Ally, Chilimo and Sife (2003) who opined that for successful and resourceful approval and application of ICT by libraries there is need to have policies to guide the entire process of information provision by the libraries. Furthermore, there is a need to have sets of guidelines explaining, the selection, acquisition, access, use and preservation of digital information in libraries alongside with the traditional print resources. Therefore, libraries must have ICT policies in place as a way forward. The study also supports the study of Farley Library Research Guides (2018) which stated that since collection represents an ongoing financial commitment that increases yearly with inflation, the library need to regularly appraise each resource based on its scholarly assessment relative to its cost. The annual evaluation of electronic resources should be designed to ensure that the collection meet the goals laid out in the policy. Through this process, electronic resources may be added or cancelled. Many factors inform this review, including but not limited to cost, usage, overlap of content, and significance to the curriculum.

Table 9: Problems Militating Against E-Resource Management

Problems Militating against Management of E-resources	Freq.	%
Lack of time and too much work load for the librarians	4	1.88
Lack of planning and policies on electronic resource management	9	4.24
High cost of e-resources	2	0.94
Communication gap between vendors and librarians	39	18.3
Inadequate personnel to handle e-tools	89	41.9

Table 9 reveals problems of e-resources management as indicated by respondents. Higher percentage of the respondents 89 (41.9%) stated that inadequate manpower to handle e-tools is a barrier to the management of e-resources. This is not surprising because, most libraries are acquiring these resources without considering who would manage them. 39(18.3%) of the respondents indicated that communication gap between vendors and librarians is also one of the problem militating against e-resource management. This could be as a result of distance in location and network problem. From the analysis, 9 (4.24%) of the respondents agreed that lack of planning and policies on e-resource management affects its management. On the final

analysis, only 2 respondents representing 0.94% agreed that high cost of e-resources is a problem in electronic resources management. The study therefore conclude that that inadequate manpower to handle e-tools is the major problem militating against the management of electronic resources in libraries. The study is in line with the study of Geller (2006) who reported that it is obvious that direct effect of the increasing accessibility of electronic resources in library collections was, and still is, the need to control and manage them. As easy as this job may sound, librarians and library professionals, are still trying (more than a decade after the appearance of these electronically based resources) to find ways to administer these resources with the same comprehensive efficiency as we accomplished with print resources. The study is also in line with the findings of Ugwu and Onyegiri (2013) asserted that staffing is another problem that affects the management of EIRS in the University library. Many of the library staff do not have background training in library and information science. Among the professional librarians, many do not have ICT skills. The study is in line with Emery, Stone and McCracken (2020) who reported that electronic resources management is one of the most fundamental concepts in any scholarly library. After automation and digitization of library resources, there is the problem of how library professional can come to term with the increase in electronic resources.

Summary of Findings

- 1.The study revealed that licensing of e-resources are necessary in managing electronic resources.
- 2.The study showed that planning and policies are the most strategic ways in which e-resources can be managed.
- 3.The study also revealed that, libraries lack adequate personnel to handle e-tools

Conclusion

The influence of e-resources in university libraries cannot be overemphasized in this digital age if excellent services are to be rendered to the patrons as well meet their information requests. Advances in information technology have transformed many activities of university libraries especially the acquisition activity. E-resources are gradually replacing the print resources of library. In this transformation, it is very important to manage these electronic resources properly for their wide and effective use, otherwise a greater part of library fund, which is spent towards this will be a waste. University libraries in South- South need to change their acquisition policies to accommodate electronic resources in order to please the information desires of their client. In order to improved client access and services, libraries have to manage electronic resources effectively by overcoming issues and challenges confronting e- resources management.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Adequate personnel to handle e-tools should be employed as this is necessary in managing e-resources in university libraries.
2. Formulation of policies on e-resources management as well as training and retraining of librarians would greatly enhance the management of e-resources in university libraries in Nigeria.
3. Good relationship between librarians and vendor should be maintained in order to improve the management of e-resources in university libraries in Nigeria.

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