

Electronic Information Resource Sharing Among Academic Libraries in Delta State, Nigeria

BY

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Abstract

The study was on electronic information resource sharing among academic libraries in Delta State, Nigeria. Data was collected for the study through a structured questionnaire. Data were analysed using frequency counts and simple percentage. The findings of the study showed that all the libraries investigated had electronic resources such as e-books, electronic newspapers, e-journals and e-magazines in their libraries. All the libraries investigated were equipped with ICT gadgets that could be used in resource sharing activities, providing suitable access to information and improving interlibrary teamwork were some of the benefits of e-resource sharing identified in the study, medium of providing access to e-resource through resource sharing was structured consortium arrangement with other institutions, but inadequate ICT facilities for resource sharing/ networking, high cost of Internet connectivity, lack of government support, inadequate number of librarians with web technology skills and difficulty in mutual agreement were identified as the major problems encountered in electronic resource sharing among academic libraries in Delta State. The study also recommended that management of academic libraries should try as much as possible to acquire all necessary ICT facilities needed for e-resource sharing and for easy dissemination of information to patrons outside their libraries. Parent institutions and library managements should ensure that they release sufficient money for the maintenance of Internet connectivity in order to sustain e-resource sharing in academic libraries.

Government should encourage e-resource sharing among libraries as this will assist librarians and other information practitioners in the sharing of information across the state, to information seekers, and librarians should acquire web technology skills needed for e-resource sharing among libraries.

Keywords: Electronic Resources, Resource Sharing, Libraries, Library users, Academic Libraries

Introduction

Library and Information Science profession is all about serving and giving out of information resources. Usually no library is capable of satisfying all the needs of its patrons and this gave rise to the idea of library collaboration. The idea is now known as resource sharing. This is so because no library can ever be self-sufficient or boast of having all the needed materials for its patrons. The essential role of a library as a lively organization, is the provision of ample materials and the matching of those materials with the requests of their clients (Abubakar, 2012).

In librarianship, resource sharing is an expression to cover co-operation, coordination, inter-library loans, co-operative acquisitions, co-operative storage and processing (Nwose and Jiagbogu, 2011). Following this reasoning it can be argued that information resources sharing is a wide phrase embracing information services cooperation, systems, and networking,

Obaro (2013) is of the view that resource sharing also known as inter – library collaboration, – is the technique whereby two or more libraries willingly come together with the plan of making their diverse resources and services accessible to one another. That is sending resources from one particular library to another as well as receiving resources in return from the participating libraries.

Resource sharing is the method whereby the material of a group of network libraries is made accessible to all the persons entitled to use any of those libraries. Lynch (2000) observed that effective relationship between information-providing organizations such as universities and other educational institutions are growing in importance. Information technology has enabled these institutions to form communities of users to share ideas, expertise, costs, and more importantly, information resources (Federal Ministry of Education, 2001).

Resource sharing is an idea which includes many mutual activities between libraries and other information centers. The introduction of ICTS have given new opportunities for better

cooperation. Digital connections, joint approaches to digital repositories, providing Content Consortiums and other practical experiences for sharing resources, are promising. Development in recent times. Usually, resource sharing, library networking and library cooperation are used interchangeably in the electronic age to mean sharing of resources of a library with the clients of other libraries. Mole (2006) stated that resource sharing is the procedure whereby the material of a group of networked libraries is made

accessible to persons permitted to use any of those libraries. Resource sharing is a wide expression embracing library collaboration, library systems, and networking. It is an expression that cover collaboration, harmonization, interlibrary loans, supportive acquisition, helpful storage and dispensation.

Kalbande (2016) observes that the need to provide information services that remove the barriers of distance and time has become even more imperative. Before now, libraries have always acquired and organized resources so that the information is accessed more easily. No library today can boast of having all of the materials that will meet all the desires of its patrons. Rather, most libraries complement their local collections with resource-sharing arrangements that allow them to offer their clientele access to a broader universe of resources. Libraries contribute in local, district, or worldwide services for the borrowing and lending of resources, supported by diverse kinds of managerial relationships and technological infrastructure.

Urhiewhu, Aji & Gogmin (2015) opined that in the past three decades, information technology has contributed immensely to information management. The existing state of information management is certainly adequate to support and encourage the sharing of materials among libraries. The pace of technical development shows no signs of abatement and libraries will find it rewarding to explore the realm of networking possibilities. Particularly, the present decade has seen a greatly renewed interest in library cooperation and mutual benefits, especially at national and global levels. This paper seeks to find out e-materials' availability in the academic libraries, benefits of e-resource sharing, ICT facilities available for e-resource sharing, extent of providing access to information materials through e-resource sharing, channels through which patrons access e-resources in e-resource sharing among libraries, problems encountered by the academic libraries in e-resource sharing, and strategies to enhance e-resource sharing in academic libraries.

Statement of the Problem

The study examined electronic information resource sharing among academic libraries in Delta State, Nigeria. The increase in the value and demand of information which continues to mount pressure on libraries to offer more effective service to their consumers has made it imperative for libraries to engaged in information resource sharing, Information processing organizations have thus been compelled to use new technologies such as ICT to enhance service delivery, especially through information sharing. Unfortunately, academic libraries in Delta State have not really engaged in electronic information resources sharing due to some reasons. Hence a dearth in

knowledge that requires investigation.

Objectives of the Study

The objectives of the study are to:

1. determine the e-resources available in the academic libraries.
2. identify ICT facilities available for e-resource sharing in the academic libraries.
3. ascertain the benefits of e-resources sharing in the university libraries
4. identify the media of providing access to e-resources through resource sharing in libraries?
5. identify the problems encountered by the academic libraries in e-resource sharing.
6. determine the strategies to enhance e-resource sharing in academic libraries.

Research Questions

This research will be guided by the following questions:

1. What are the e-resources available in the academic libraries?
2. What are the ICT facilities available for e-resource sharing in the academic libraries?
3. What are the benefits of e-resources sharing in the university libraries?
4. What are the mediums of providing access to e-resources through resource sharing in libraries?
5. What are the problems encountered by the academic libraries in e-resource sharing?
6. What are the strategies to enhance e-resource sharing in academic libraries?

Literature Review

Onoriode (2016) comments that libraries throughout the globe make use of various electronic information sources available for use by all kind of students, researchers and staff in their individual institutions. Emojorho and Nwalo (2009) in their research found that a high proportion of teaching and research staff were aware of the collections of electronic journals available in the library and there was an increasing preference for electronic materials. They further commented that collections of electronic materials in the library are highly appreciated and most patrons intend increasing their use.

Umeozor (2019) also reported that the use of electronic materials available in the library leads to increased productivity of work, learning, teaching and research. Makgahlela and Bopape (2014) in their study confirmed that students use all the electronic information materials available to them often such as CD-ROMs, online

databases, web sources and audio-video tapes.

The advent of information and communication technology, which characterizes the electronic era, has brought a turnaround in resource sharing. Digitization of resources is intended to uphold the development and defense of digital contents. Oladapo (2006) noticed that in e-sharing of materials, the use of computers and telecommunications make easy the exchange of information materials. This means that the introduction of computers using the Internet and online services has brought upgrading in the sharing of materials. Information and communication technology has brought to bear new scope in the methods of generating, dispensing, storing and disseminating of information. Digitization brings information to the client whether in the office or at home. Once the patron has a processor connected to the Internet, he does not require visiting a library building to access resources. One way of doing this is by placing e-resources on a network so that they become accessible to all participating libraries. It also encourages updating of information on regular basis.

Electronic information resource sharing has diverse types of benefit to librarians and library clients. Obaseki, Oye and Mamman (2012) and Igwebuikwe (2012) in their studies found out that electronic information resource sharing provide quick universal and appropriate access to and exchange of information with knowledgeable and professional employees in the information fields, easy sharing of research results, enhanced joint research, helping the library to provide information to their customers irrespective of geographical location, better organization of information and space maintenance and enhanced interlibrary teamwork.

Ilo (2008) in a research reported that e-resource sharing is a progression on analogue resource sharing. To a great extent, it has removed severities and inefficiencies, which characterized analog sharing. The Internet expose clients to resources of great universities in the world and facilitates unparallel degree of relationship, resource sharing and information access. Information sources are situated in different libraries all over the world. Such information sources have been packaged in digital formats. The libraries can therefore, share online databases, e-journals, online reference tools, web resources, e-books etc.

Siddike (2011) found that since the commencement of computer revolution, the impact of e-materials sharing on education in general and library services in particular has been philosophical. High speed transmissions of information through electronic networks are reducing the physical restrictions to information, changing the role of the publisher and

the library mediators in the sequence of learned communication. With the rise of the Internet and the National Information Infrastructure (NII), geographical barriers are finally broken and access to e-information is economical. For library patrons the information super highway is becoming the main way of accessing information. The vital aim of material sharing is to provide the right information expeditiously to the client as at when required

Ekoja (2011) reports that Internet and other local and national networks have made resource sharing easy and have further facilitated information exchange. Emergence of library consortia is a development which has opened up new opportunities for better collaboration among libraries. The emergence of library consortia is a promising development for resource sharing. Application of Information Communication Technology (ICT) has made resource sharing feasible. Libraries now find it easy to connect in different kinds of shared potential using OPACs and the development of digital library software like Greenstone, CDSware, and the CERNdocument server software. Also, Chukwusa (2017) and Aina (2013) reported that Web 2.0 tools like blogs, instant messenger, online communities, video sharing, web conferencing, face book, RSS feeds, Wikis, Podcasts, flicker, tagging and MySpace have been identified as facilitating resource sharing electronically.

Electronic information materials can be access through different means. However, the most significant to Nigerian academic institutions is the World Wide Web (www). There are certain other EIR that are accessed through offline channels such as CD/ DVD databases, library intra network systems, online databases, etc (Igbo & Imo, 2017).

Ilo (2008) stated that by providing various access points for clients to find necessary information, the world has become a global village and everybody is connected to an e-neighbor. With ICT, the resources of the libraries participating in teamwork can be accessed online. This affords clients enough opportunity to join a vast sea of information without fundamentally investing on power and time. The retrieval of information and the sharing of the same is facilitated by ICT.

Accessing EIR also needs some facilities as indicated by Siddike (2011), it include broad band Internet connectivity, personal computers (desktop, laptop, IPADS, etc), computer server, library management software, antivirus, library/organizational website, scanners, photocopiers, CD-ROM readers, printers, multimedia/ digital projectors, digital cameras. The foregoing shows that EIR has become a convenient information source of current information for academic staff and students in Nigerian

universities. Thus, efforts made by libraries to make them accessible to their consumer community would be a worthwhile venture.

University libraries' partnership in electronic resource sharing in Nigeria has experienced a number of challenges. These have been discussed by Onoriode (2016). The challenges identified include: lack of relevant ICT skills and awareness of the existence of knowledge sharing platforms, inadequate ICT facilities, unstable power supply and low level of conversion of local content for national and international access, among others.

The study by Makgahlela and Bopape (2014) on the use of e-resources by the postgraduate students at the Delta State University, Nigeria exposed that, although the postgraduate students had access to e-resources, inadequate searching skills, unreliable power supply, inadequate space in the library and low bandwidth proved to reduce their use thereof.

On strategies to improve e-resource sharing Umeozor (2019) in their study found that if the library ensures sound and excellence automation services and information resources, creates new approaches to user education, pays attention to the provision of continuing education for library staff, help them to master the new techniques required for the management of electronic information resources and services, the gains of automation and electronic resource sharing would be beyond measure.

Methodology

The study examined electronic information resource sharing among academic libraries in Delta State, Nigeria. The population of the study consists of all the professional librarians in the libraries under study. The academic libraries are Delta State Polytechnic Library, Ozoro (11) Delta State Polytechnic Library, Otefe - Oghara(4) Delta State Polytechnic Library, Ogwshi-Uku (6) and Delta State School of Marine Technology Library, Burutu (6). Questionnaire was used to gather data for the study. A total of 45 copies of questionnaire were distributed, but only 27 copies were duly filled and returned which gave the return rate of 54% percent. Data analysis were done using frequency counts and percentage.

Data Analysis

Table 1: Availability of Electronic Resources in Libraries

Items	Frequency	%
Newspapers	27	100
Journals	21	77.8
Books	27	100
Magazines	15	55.6
Encyclopedias	16	59.3
Web-based Resources	21	77.8
Abstract and Index	17	63.0

Result of availability of electronic resources in libraries. Table 1 shows that all the respondents agreed that electronic books and newspapers are available in their libraries. Twenty one percent of them attested that electronic journals and web –based resources were available in their libraries respectively.

Table 2: ICT Facilities Available for E-resource Sharing

ICT Facilities	Frequency	%
CD-ROM Readers	9	33.3
Library Management Software	16	59.3
Internet Servers	25	92.6
Scanners	18	66.7
Library website	12	44.5
Digital Camera	5	18.6
Electronic Mail Facilities	8	29.7
Internet Connectivity	14	51.9

Table 2 shows that over 25(92.6%) of the respondents opined that Internet servers were available in their libraries. Also, 18 (66.7%) of the respondents affirmed that scanners were available in their libraries, while 16 (59.2%) agreed that there were management software in their libraries. The study revealed that libraries studied had ICT facilities for e-resource sharing.

Table 3: Benefits of E-resource Sharing

ICT Facilities	Frequency	%
Easy distribution of research results	20	74
Provides suitable access to information	27	100
Improved interlibrary teamwork	27	100
Provide faultless information for their users	21	77.7
Improved joint research	23	85.1

Table 3 above shows the benefits of e-resource sharing. Twenty seven (100%) of the respondents agreed that e-resource sharing provides suitable access to information and enhances interlibrary cooperation. This is an indication that e-resources sharing is very beneficial to libraries and their users in diverse ways irrespective of their location.

Table 4: Medium of Providing Access to E-resource in Resource Sharing

Items	Frequency	%
Downloading EIR from various open Access Website and creating folders in the library portal	18	66.7
Individual user oriented request through other academic instructions in a network arrangement	19	70.4
Through a structured consortium arrangement with other institutions	23	85.2
Co-operative collection development with other university libraries	21	77.8

Table 4 reveals that 23(85.2%) of the respondents opined that the medium used for providing access to e-resource was through a structured consortium arrangement with other institutions. Twenty one percent of them stated that co-operative collection development with other academic libraries was the medium through which e-resources could be access in resource sharing. Only 19 (70.4%) of them agreed that Individual user oriented request through other academic institutions in a network arrangement is the medium to access e-resources in resource sharing. The table also shows that 23 (85.2%) of the respondents agreed that a structured consortium arrangement with other institutions is the medium used for providing access to e-resources.

Table 5: Problems Encountered in E-resource Sharing

Problems	Frequency	%
Difficulty in mutual agreement	17	62.3
Lack of awareness of the existence of resource sharing platforms	2	7.4
Inadequate ICT facilities for resource sharing networking	25	92.6
High cost of internet connectivity	22	81.5
Lack of electronic resource sharing policies/standards in the institutions	16	59.3
Declining budgets for e-resources	12	44.4
Inadequate number of librarians with web technology skills	19	70.4
Insufficient bandwidth for easy access to the internet	14	51.9
Lack of government support to universities on e-resource sharing	20	74.1

Problems encountered in e-resource sharing. Table 5 shows that 25 (92.6%) of the respondents stated that inadequate ICT facilities for resource sharing/ networking was the problem encountered in e-resource sharing. Twenty two (81.5%) opined that high cost of Internet connectivity was the problem they have. Only 20 (74.1%) of them agreed that lack of government support to academic on e-resource sharing was the problem. The study found that that facilities were there, but grossly inadequate.

Table 6: Strategies to Enhance E-resource Sharing

Strategies	Frequency	%
Increment in e-collections	26	96.2
Installation of contemporary ICT facilities	27	100
Already established library networking and resource sharing should be encouraged	18	66.7
Proficient and capable library staff should be assigned	19	70.4
Network providers should provide technical assistance to participating libraries in the creation of bibliographic databases	20	74.1
A board of experts should be appointed and sustained to provide support to libraries and a central host mechanism should be installed for creating a union catalogue, (combining catalogues of all participating libraries)	17	63.0
Readers friendly environment should be sustained in the library	14	51.9

Table 6 shows that 27(100%) of the respondents opined that all modern IT facilities should be installed in the library. Twenty six (96.2%) of them responded that there should be increment in e-collections in the library. Only 14 (51%) respondents stated that readers friendly environment should be sustained in the library. This means that for proper and adequate e-resource sharing there is need for good cordial relationship between librarians and library clientele.

Summary of Findings

- The study revealed that all the academic libraries studied had electronic resources in their libraries such as e-books and electronic newspapers, e-journals and e-magazines.
- The study revealed that e-resource sharing provides suitable access to information and improved interlibrary cooperation.
- It was discovered from the study that all ICT facilities in the table were available as indicated by the respondents in their responses.
- The findings on medium of providing access to e-resources through e-resource sharing revealed that the libraries engaged in a structured consortium arrangement with other institutions, co-operative collection development with other academic libraries and individual user oriented request through other academic institutions in a network arrangement.

The study shows that inadequate ICT facilities for resource sharing/networking, high cost of Internet connectivity are the problems facing e-resource sharing among libraries.

- The study further revealed that increment of library e-collections, installation of contemporary IT facilities in the library were the major strategies that can be used to enhance e-resource sharing among libraries.

Discussion of Findings

Findings were discussed based on the following sub-headings: availability of electronic resources in libraries, benefits of e-resource sharing, ICT facilities available for e-resource sharing, medium for providing access to e-resource, problems encountered in e-resource sharing and strategies to enhance e-resource sharing.

Availability of Electronic Resources in Libraries

The study revealed that all the academic libraries studied have electronic resources in their libraries such as e-books and electronic newspapers, e-journals and e-magazines. Electronic library and information services refer to the diversity of electronic and digital sources of information accessible to clientele within a particular library. The transformation in conventional service delivery, from analogue to digital, has come about very swiftly and libraries and information centres have made changes in order to successfully deliver e-resources to the educational community. Likewise, in order to enable patrons to use the electronic resources well, various libraries engage in resource sharing and to see how patrons can have more access to their numerous materials. The finding is in agreement with that of Igbo and Imo (2017) that the university libraries studied had different types of e-information resources and availability of these resources may be due to good Internet connectivity which may have made it easier for

them to access web-based resources and databases from which access to e-books, e-journals, e-newspapers and magazines are made possible. The finding is also in support of LRCN (2019) which noted that some of the information materials shared among libraries include print and non-print materials such as databases, books, journals, e-resources among others.

ICT Facilities Available for E-resource Sharing

It was discovered from the study that all ICT facilities in the table are available as indicated by the respondents. This means that all the libraries investigated are equipped with ICT gadget (but inadequate) that could be used in resource sharing activities in libraries. This is also in consonance with the study of Siddike (2011), which observed that necessary facilities required for e-resource sharing. Engaging in e-resource sharing, requires some ICT equipment that includes broadband Internet connectivity, personal computers, computer server, library management software, antivirus, scanners, photocopiers, CDROM readers, etc. The findings is also in agreement with Naik (2019) that in this digital environment, most of the educational institutions are having e-resources, which require computers, Internet bandwidth, printers, and experts in library profession in order to use the available resources.

Benefits of E-resource Sharing

The study revealed that e-resource sharing provides adequate access to information and improved interlibrary networking. This is an indication that e-resource sharing is beneficial to both librarians and library users in meeting the information needs of the users. The finding is in line with those of Obaseki, Oye and Mamman (2012) and Igwebuike (2012) that electronic information resources sharing have different kinds of advantage. These include but are not limited to providing rapid universal and suitable access to and exchange of information with knowledgeable and professional employees in the information fields, easy distribution of research results, improved joint research, helping the library to provide faultless information for their customers irrespective of geographical location, serving in better organization of information and space maintenance and improved interlibrary networking.

Medium of Providing Access to E-resource in Resources Sharing

The findings on medium of providing access to e-resources through e-resource sharing revealed that the libraries engaged in a structured consortium arrangement with other institutions, co-operative collection development with other academic libraries and individual user oriented request through other academic institutions in a network arrangement. The responses of the respondents seem higher in other items except

downloading EIR from various Open Access Website and creating folders in the library portal. This shows that libraries involved in e-resource sharing may likely provide good and better services to their users irrespective of their locations than those who did not participate. The study is in line with that of Kalbande (2016) who opined that information is not limited to the items held by library; rather, the user can share and access any modern library in the world through the World Wide Web. The findings support the study of Ahmad and Yahaya (2018) that the Internet is the major way in which academic staff share their knowledge with the outside world. With the emergence of laptops along with modem, academic staff can now access and share information with the whole world.

Problems Encountered in E-resource Sharing

Inadequate ICT facilities for resource sharing/networking, high cost of Internet connectivity, lack of government support, inadequate number of librarians with web technology skills and difficulty in mutual agreement were identified as the major problems encountered in electronic resource sharing among academic libraries in Delta State. This could be as a result of poor budgetary allocation on the part of government and management of institution refusing to release sufficient money for the acquisition of ICT facilities needed for e-resource sharing in libraries. The findings is in support of that of Manjunatha and Shivaliongaiah (2003), and Aina (2013) who in different studies, opined that those factors were hindrances to e-resource sharing. These indicate that the problems of e-resource sharing are mostly related to inadequate funding. The findings is also in agreement with Heidari and Khakpour (2013), that lack of strong IT infrastructure is one of the main problems that would limit the effectiveness with which academic libraries could access, share and utilize the IT-based information services in general.

Strategies to Enhance E-resource Sharing

The study revealed that increment of library e-collections, installation of contemporary IT facilities in the library; already established library networking and resource sharing should be encouraged, proficient and capable library staff should be assigned and network should provide technical assistance to participating libraries in the creation of bibliographic databases, etc. All the above views were accepted as strategies for enhancing e-resource sharing among academic libraries in Delta State. If adhered to by libraries studied, and other libraries intending to engage in resource sharing activities, it will go a long way in solving most problems faced by librarians and libraries generally in issues relating to information resource sharing in Nigeria, coupled with the fact that NUC has established the NgREN to meet the information requests for research and

education through a connection that links participating libraries for sharing e-services (Igbo & Imo, 2017). The findings also corroborate those of Ugwuanyi, Nwafor & Onoh (2013) that if the library ensures sound and quality automation services and information resources, creates new approaches to user education, pays attention to the provision of continuing education for library staff, help them to master the new techniques required for the management of electronic information resources and services, the gains of automation and electronic resource sharing would be immeasurable.

Recommendations

Academic libraries in their present state are handicapped financially and suffer from budget cuts. For these libraries to be able to stand the test of time, library teamwork with well-endowed institutions will be of huge benefit. Base on this, the following recommendations were made:

1. The management of polytechnic libraries should try as much as possible to acquire all necessary ICT facilities needed for e-resource sharing for easy dissemination of information to patrons outside their libraries.
2. Parent institutions and libraries' management should ensure they release sufficient money for the maintenance of Internet connectivity in order to sustain e-resource sharing in university libraries.
3. Government should encourage e-resource sharing among libraries as this will assist librarians and other information practitioners in the sharing of information to information seekers.
4. Librarians should acquire web technology skills needed for e-resource sharing among libraries.
5. There should be mutual agreement among libraries engaged in e-resource sharing.
6. Libraries involved in e-resource sharing should ensure they follow lay-down rules and regulations governing e-resource sharing.

Conclusion

The place of e-resource sharing cannot be overlooked in modern day library, as no library across the globe, can afford to acquire sufficient information resources for its clients due to inadequate ICT facilities, lack of qualified personnel, high cost of Internet connectivity and low bandwidth in some libraries, lack of government support, declining budgets for e-resources acquisition/licensing, lack of electronic resource sharing policies/standards in the institutions, etc. It is therefore, necessary for all libraries globally, to delve into structured consortium arrangement with other institutions in e-resource sharing. This would enable them contribute to the global pond of information in

the present information society. With the aid of information technology, electronic resource sharing is capable of meeting users information needs.