

Research Article

PROVISION AND MANAGEMENT OF INFORMATION TOOLS AS A CATALYST OF USAGE OF ELECTRONIC INFORMATION RESOURCES IN FEDERAL AGRICULTURE UNIVERSITY LIBRARY AMONG NON_ACADEMIC STAFFS ABEOKUTA, NIGERIA

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ABSTRACT

The study investigated the availability, access and management of electronic information resources in Federal University of Agriculture library Abeokuta, Nigeria. The study adopted quantitative approach as research paradigm; with survey as research methods. Questionnaire was used as the primary instrument for data collection in which the researcher took 1.8% of the entire respondent population= 1447= 26. Twenty six (26) copies of the questionnaires were given to the respondents. Twenty three (23) copies were retrieved and analyzed; representing 88.50%. The entire non-academic staff was used as population of the study. From the findings of the study therefore, the influence of demographic variables (gender, age, education and professions) about the management of electronic information resources was not significant at the surveyed university library. Thus, the study recommended increased investment in electronic databases such as AGORA and African Journals, others include, MEDLINE, PubMed, Biomed Central, Online and HINARI, CAB Abstracts, BEAST CD, VET CD, and TEEAL etc ICT facilities, staff training and development at the surveyed university library to promote increase in the management of electronic information resources to satisfy the needs of users as ultimate goal of any library and information center.

Keywords: Availability, Accessibility, electronic resources, information technology, ICT skills, IL skills, non-academic staffs.

INTRODUCTION

A library is a collection of sources of information and similar resources, made accessible to a defined community for reference or borrowing. It provides physical or digital access to material, and may be a physical building or room, or a virtual space, or both. According to Okoye, M. &Ezeani (2009) opined that electronic resources include CD-ROMs, e-books, e-journal, digital collections, databases and websites. Therefore, electronic information resources (EIRs) should be identifies, select, acquire, catalogue and maintain them by library staff for easy accessibility to users. According to (Breivold, 2009) stated that electronic resource management as the practices used by librarians to keep track of important information about electronic information resources, especially internet based resources such as electronic Journals, databases, and electronic books. Management of electronic information resources is the practices and software systems used by libraries to keep track of important information about electronic information resources, especially internet-based resources such as electronic journals, databases, and electronic books. The UMYU library has a number of CD-ROM collections and subscribes to some online databases such as Science direct, OARE, JSTOR, AGORA, HINARI and EBSCOHOST This research therefore intended to assess the management of electronic information resources (EIRs) of FUNAAB Library.

Statement of the Problem

An Academic library is expected to properly manage and provide relevant, accurate and up to date information resources both traditional and electronic information in order to satisfy the needs of the users, these resources can only be used and accessed when they

are managed. Meanwhile, based on the researcher's preliminary survey, the electronic information resources in FUNAAB library are not effectively managed due to Poor storage environment; inadequate electricity power supply, technical problem, inadequate qualified staff, network problem and lack of awareness about the existence of the e-resources are the major problems affecting the management of electronic information resources and utilization in the library. This study therefore intends to study the availability, access and management of electronic information resources at FUNAAB library and figure out the solutions to the identified problems.

Objectives of the Study

The purpose of this research is to study the availability, access and management of electronic information resources in Federal University of Agriculture Abeokuta, Nigeria. The specific objectives are to:

1. Identify the types of electronic information resources available in the FUNAAB library.
2. Identify the strategies for enhancing the management of electronic information resources
3. Determine the extent of utilization of the electronic information resources
4. Ascertain the IT-related problems that affect the management of electronic information

REVIEW LITERATURE

Okiki & Asiru, (2011), Thanuskodi, (2012). opined that electronic resources as those resources which include documents in electronic formats that can be accessed via internet in a digital library environment as information stored and transmitted in digital, electronic or computerized formats such as diskettes, CD-ROM, databases, DVDs, online public access catalogues (OPAC), bibliographic and full-text databases, MEDLINE, electronic journals,

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scholarly databases, information gateways, e-books, internet and electronic mails. online journal, e-magazine, e-learning tutors, e-discussions, e-news, data archives and e-mail online chatting and deliver a collection of data, be it text, image collection, other multimedia products like numerical and / or graphical mode. Electronic resources include e-text or electronic books, locally loaded databases, websites and abstracting and indexing databases According to Shuling (2007), electronic information has gradually become a major resource in every university library. The emergence of electronic information resources, simply referred to as electronic resources, has tremendously transformed information handling and management in academic environments and in University libraries in particular.

Availability of Electronic Information Resources

Availability of information resources refers to the presence of books and non-book materials in a library and provides the opportunity to access a wide range of topics on different subjects. E-resources are available in various forms like e-books, digital libraries, online journal, magazine, e-learning tutors, e-discussions, e-news, data archives and e-mail online charting and deliver a collection of data, be it text, image collection, other multimedia products like numerical, graphical mode Akinsola, Tella, & Tella, (2007) Ani & Blessing (2008) revealed the high level of developing electronic information resources in University libraries through direct subscription and usage of internet resources but the ability to find and retrieve information effectively can be considered as a transferable skill which is useful for future life and to Consequently, the study carried out by Vijayakumar (2017) opined that majority of the respondents said that newspapers, project reports, subject books, CD-ROM database and reference books are available and thesis, general books and web resources are less available. His views were corroborated by Kwaghgba and et-al (2015), Onye (2016), Yaseen and et-al (2016), Ajiji (2017), Aladeniyi and Temitope (2018) and Das Parnab (2015), while Abubakar (2017). It stressed the e-databases subscribed to research by agricultural scientists in federal University libraries in Nigeria such as AGORA and African Journals, others include CD-ROM, MEDLINE, PubMed, Biomed Central, Online and HINARI, CAB Abstracts, BEAST CD, VET CD, and TEEAL. This finding is agreed upon by Bello and Chioma (2020) an evaluation of the extent of ICT deployment in academic libraries in Oyo State, Nigeria, on the globalization of library and information services, where they confirmed the availability of E-Granary, EBSCOHOST, JSTOR, Jaypee Digital, HINARI, AGORA and OARE with the Directory of Open Access Journals (DOAJ) and partial Institutional Repository (IR). These views were agreed upon by Rukwaro (2015) and Ekene and et-al (2016) They claimed that libraries receive information materials such as books, theses, papers, magazines, encyclopedias, dictionaries, e-journals e-books, etc. But Akpe and et-al (2018) has a different opinion where he stated that information resources are not sufficient. This indicates that the views of respondents on their responses to the types of information requirements in the Library are not too different from each other. The study conducted by Afiamagbon and et-al (2020) Availability of information resources as factors that influence research productivity of academic staff at Lead City University, Nigeria, on information literacy skills, indicates high level information resources availability to lecturers and other academic staff in Lead City University who are utilizing them in conducting researches. However, Abubakar (2020) A case study of pharmaceutical science students from the University of Jos investigated the availability and accessibility of information resources in university libraries for academic use by students and revealed that books are some of the library's information resources. Journal, web libraries and internet, e-books, computers, e-journals, encyclopedia index, handbooks, newspaper and magazines are other

information resources that were strongly suggested by respondents, some of the data resources were shown poor, as revealed by respondents, while more than half of the respondents recognized them. They are: audio-visual conference proceedings and abstracts and indexes for monographs and regular CD-ROM databases. However, Kutu and Olabode (2020) has a different view in his study on the availability of information resources in libraries, as he stated that the most available print information resources were newspapers, textbooks and journal collections while the least available included indexes, technical reports and manuscripts. This view was corroborated by Ilogho and et-al (2020), Swaminathan and et-al (2020) and Babarinde. And Festus (2020). Interms of accessibility, scholars have divergent views on accessing information resources. However, according to Jabbar et-al (2020), Study Accessibility and Use of Research Scholars' Institutional Repository: A Case of the COMSATS Institute of Information Technology, Lahore, they stated that users accessed Information Resources out of campus while other respondents accessed Information Resources within campus and some did so through IP and very few used other mode of access. This study is similar to that of Jan and Reman (2020) the University Students of Pakistan: A Quantitative Study of Khushal Khan Khattak University of Karak-Pakistan on Internet Usability and Accessibility, they found out that majority of the students of the Khushal Khan Khattak University Karak was accessing the Internet at their homes, hostels and the University Library. Interestingly, others were accessing the Internet at classrooms and Computers. However, Olubiyo and Yemi (2020) have different view on his study On Knowledge, Accessibility and Use of Serial Publications among Adeyemi College of Education Undergraduate Students, Ondo Library, they stated that students access serial materials by asking staff, following directional signs, browsing racks and shelves and searching periodical catalogue in that order.

Management of Electronic Information Resources

Management of electronic resources often refers to the tools and processes used to organize administrative metadata, such as license terms, vendor contracts and usage statistics. Jeyapragash, A.Muthuraj, & Rajkumar, (2017) pointed out that ERMs help libraries to keep track of their online subscriptions and license agreements. They will equally enable libraries to view all information related to a particular resource without having to consult multiple files and spreadsheets. In managing electronic information resources therefore, issue like digital preservation is very essential. Thus, preserving electronic or digital information resources refers to a method for ensuring ongoing access to digital objects or resources. It involves keeping the old technology, that is, hardware and software that were used to create and access the digital information in their original form and environment. Gbaje (2012) posited that digital preservation as a method for keeping stored digital objects permanently accessible for long-term use. While Adegboro, Okwilagwe, & Salaam, (2013), have the viewed that management of electronic resources demands expertise in handling systems which are more complex than library management systems (LMS). It requires setting priorities on staff times, deciding how and who presides over the functionality of all things electronic, such as A-Z lists, federated search engines, e-journals, abstracting and indexing databases, dark archives, and ERMs (Electronic Resource Management Systems). It also involves providing the library users with convenient ways to find and access them and providing library staff with the tools to keep track of them.

Staff Related Problems in the Management of Electronic Information Resources

Library staffs are those personnel who are charged with the responsibility of identifying, selecting, acquiring, processing,

organizing, storing, securing, preserving, retrieving and disseminating relevant information resources Kinengyere, (2007) stated that the availability of information does not necessarily mean actual use because the users may not be aware of the availability of such resources, they do not know how to access these resources, or do not know what the resources offer. Thus, the electronic information resources should to be properly managed so as to satisfy the needs of users and to make accessible to users as target customers. And also human errors could be seen as a factor which affects the management of electronic information resources. Always what (data or information) has been inputted in to a machine or computer is what to be accessed, so staff should be cautious about information in their work in order to avoid errors. There is a need for university library to trained their staffs on technical knowhow on managing the e resources either in house or seminar/ Conferences and workshop and engaged the staff when automating and installation of new technology in the library to fully archive the objectives of subscription of the e resources. The researcher observed that no literature determine the access and management of the e- resources, strategies and challenges associated with management of e resources in FUNAAB Library

The Use of Electronic Information Resources in Agriculture University Libraries

In the same vein, Oyewumi and et-al (2015) A research on Information Communication Technology (ICT) and its effect on the use of newspapers in University Libraries in Nigeria was conducted. The outcome clearly shows that most respondents used scholarly journals twice a month and on a monthly basis and used them deliberately for self-examination, learning more about a subject, assignment and coursework. The research also indicates that the participants can readily access and access academic journals. Most of them suggested that academic journals helped educate and guide them on how to conduct research and perform quality research.. The finding was agreed upon by Aba and et-al (2015) Oriogu and et-al (2015). A comparable view was that of the study carried out by students of the Federal University of Technology, Owerri, on the availability, accessibility and usage of library information services (FUTO).The study reveals that World Wide Web (WWW), e-mail services, e-journal, e-books, e-database and DVD/CD ROMS database, textbooks and internet are the resources that students mainly utilize. They often use tools for electronic content, such as databases, electronic journals, and electronic books. cybercafés, reports, handbooks seminar/conference maps/atlas, frequently, while CeRA Journals India stat, CABI Abstract Horticulture Online Database, Agricultural Economics Database EBSCO Resource J-Gate Plus Fortnightly, FAO and Agricola Agricat were utilized moderately to prepare for examination, browsing the web, up-dating knowledge, in-depth research work, Up-dating and correspondence lecture notes. The majority of respondents decided to use the information tools to acquire general information and for analysis, assignment and study purposes. The discoveries were supported by Owolabi and et-al (2016), Kumar (2017), Akpe and et-al (2018), Aladeniyi and Temitope(2018) and Salubi and et-al (2018); while Madondo and et-al (2017) and Madu and et-al (2018) In their research on the use of electronic information services by undergraduate students at the Faculty of Management and Administration at the University of Africa, Mutare, Zimbabwe and on the availability and use of ICT for information retrieval by undergraduate students at the Ramat Library, University of Maiduguri, respectively, they have contrary views. They asserted that undergraduate students at Africa University typically use electronic information services inadequately. The results revealed the low level of computer usage in the library for the retrieval of information. CD

ROM use was very poor and there was a low degree of internet use. Most respondents also did not use e-mail in the Library for information retrieval. In addition, the above studies show beyond reasonable doubt that the respondents used knowledge services with serious disagreement that there is a low level of resource utilization in some African countries including Nigeria. But the degree of consumption is very high in developing countries like India. However, it is of great concern to access and use agricultural information, tools, in FUNAB in Nigeria. But since then, what has happened? Any of the barriers may be discovered through current research.

Problem of ICT Related Facilities in the Management of Electronic Information Resources

For the management of electronic information resources in any given library, academic libraries in particular, there is need a lots of information and communication technology (ICTs facilities) and these include; internet connectivity, electricity power supply, computers, scanners, air conditioners, storage devices, printers, programs or applications. These facilities fail to work effectively sometimes and as a result, libraries face difficulties in managing its information resources and services. This work is therefore an attempt to address this issue, and is intended to examine the problems encountered in managing electronic information resources in Federal University of Agriculture Abeokuta, Nigeria Ijeoma, (2006) has the opinions inadequate ICTs facilities erratic power supply in-depth ICT skills and information searching skills among library staff, and cost of using the cybercafé are barriers to the use of electronic resources; inadequate resources like computers, and poor internet connectivity, inappropriate usage and lack of appropriate skills among users also affects the management of electronic information resources in libraries.

Population

The population of the study consist all the non-academic staffs in Federal University of Agriculture Abeokuta, Nigeria.

Table .1 Population of the Study

S/N	Non-academic staffs	Sampled	Questionnaire administered	Questionnaire retrieved
1	1447	26	26	23

Figure 1

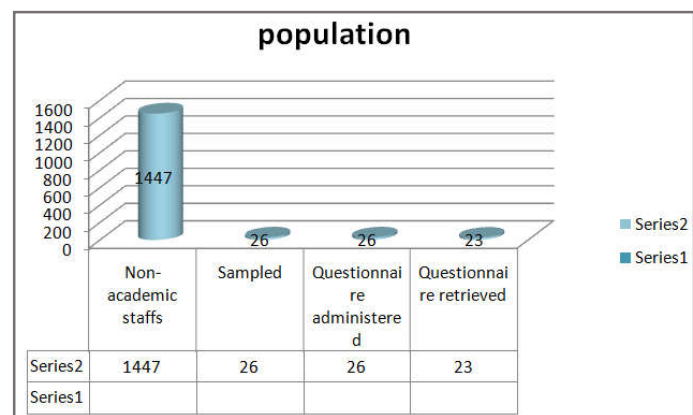


Table 1 and figure 1. above presents the population of the respondents to understand the Availability, Accessibility and Management Information Resources as a Catalyst of Utilization of Electronic Information Resources by Non-Academic Staffs in Federal University of Agriculture Abeokuta, Nigeria; the sample of 26 means around 1.8% is justifiable. However, at last only 23 questionnaires were returned with complete response.

Table 2 Respondents by Qualification

The following table presents the respondents according to their educational qualification as users of the FUNAAB Library

Qualification

S/N	Qualification	Frequency	Percentage
1	PhD	-	-
2	M Sc	1	4.3%
3	BSc	12	52.2%
4	ND	4	17.4%
5	SSCE	6	26.1%
6	Total	23	100%

Figure 2

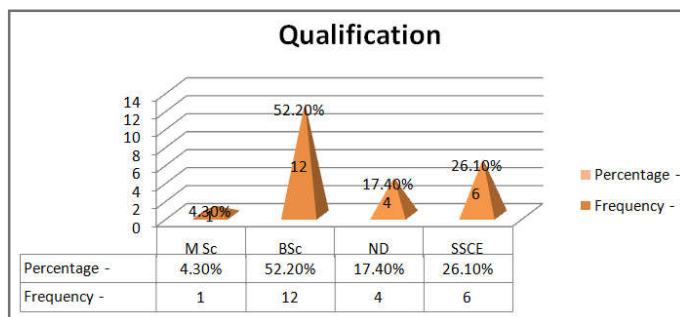


Table 2 shows that majority of the respondents have BSc with 12 members which is (52.20%) followed by those with Senior secondary school certificate 6 in number which stands for (26.10%) and then those with ND who are 4 in number which represents (17.40%) followed by those with MSc who is 1 that is (4.30%) and are the least in terms of educational qualification among the non-academic staff of FUNAAB using the Library.

Table 3 Types of Electronic Information Resources in FUNAAB Library

S/N	Variables	Frequency (Yes)	Percentage	Frequency (No)	Percentage
1	E-books	29	74.4%	10	25.6%
2	E-journals	35	89.7%	4	10.3%
3	Internet	39	100%	-	-
4	CDs/DVDs	27	69.2%	12	30.8%
5	Audiovisual	5	12.8%	34	87.2%
6	Databases	39	100%	-	-

Table 3 indicates that, internet and databases are the highest electronic information resources in FUNAAB Library with 39 (100%) respondents each, followed by e-journals with 35 respondents that stand for (89.7%) then e-books with 29 respondents that represents (74.4%) CDs/DVDs are the next with 27 respondents which is (69.2%) and then lastly audiovisual resources with only 5 respondents which is (12.8%).

Table 4. Strategies for the Enhancement of the Management of E-Resources

S/N	Variables	Frequency (Yes)	Percentage	Frequency (No)	Percentage
1	OPAC	39	100%	-	-
2	Library automation	20	51.3%	19	48.7%
3	Information literacy	12	30.8%	27	69.2%
4	Integration settings	15	38.5%	24	61.5%
5	Consortium	-	-	-	-

Table 4. indicated that, online public access catalogue (OPAC) is the major strategy used for the enhancement of the management of electronic information resources in FUNAAB Library with 39 (100%) respondents, followed by library automation with 20 (51.3%) respondents, followed by integration settings with 15 respondents that is (38.5%) and then lastly information literacy that has 12 respondents which stands for (30.8%) respectively. These strategies are used in order to provide accurate and relevant services to the library users for them to be satisfied.

Table 5. Utilization of Electronic information Resources

FUNAAB	Non-academic									
	Very high		High		Medium		Low		Very low	
frequency/%	F	%	F	%	F	%	F	%	F	%
Journals	14	60.87	1	4.35	2	8.70	2	8.70	4	17.39
Text books & Ref books	8	34.78	3	13.04	2	8.70	6	26.09	4	17.39
Conf proceedings & Technical reports	8	34.78	2	8.70	3	13.04	7	30.43	3	13.04
Government publications	8	34.78	2	8.70	4	17.39	3	13.04	4	17.39
Thesis /Dissertations/ projects	6	26.09	1	4.35	3	13.04	5	21.74	5	21.74
Magazines	6	26.09	4	17.39	6	26.09	3	13.04	5	21.74
News papers	6	26.09	3	13.04	8	34.78	2	8.70	6	26.09
Atlas, Maps&Posters	6	26.09	0	0.00	3	13.04	4	17.39	6	26.09
Manuscripts	8	34.78	4	17.39	1	4.35	2	8.70	6	26.09
E-databases	8	34.78	5	21.74	3	13.04	0	0.00	6	26.09
E-Books	5	21.74	6	26.09	2	8.70	3	13.04	7	30.43
E-Journals	7	30.43	6	26.09	2	8.70	6	26.09	5	21.74
E-thesis/projects	5	21.74	2	8.70	3	13.04	4	17.39	5	21.74
E-Newspapers&E-Zines	8	34.78	4	17.39	5	21.74	0	0.00	8	34.78

In order to determine the extent of the use of electronic information sources studied in the FUNAAB Library, a list of information resources was provided to the respondents to rank according to priority status. Table 6 above shows the information resources rank as per priority in the federal Agriculture University Library studied. Majority ranked books, journals, e-books and e-journals much higher Government publications, atlases, maps and posters, for instance, are the type of library information resources ranked very lower

Table 6. Staff Related Challenges in the Management

S/N	Variables	Frequency (Yes)	Percentage	Frequency (No)	Percentage
1	Inadequate qualified staff	24	61.5%	15	38.5%
2	Negligence of the staff/ staff errors	15	38.5%	24	61.5%
3	Lack of information retrieval skills by the staff	19	48.7%	20	51.3%
4	Poor technical support by the staff	23	59.0%	16	41.0%
5	Lack of IT skills by the staff	14	35.9%	25	64.1%

Table 6 indicates that, the highest challenge with regard to staff in the management of electronic information resources in FUNAAB Library is inadequate of staff with 24 (61.5%) respondents, followed by poor technical support by the staff with 23 (59.0%) respondents and then lack of information retrieval skills by the staff with 19 (48.7) respondents, followed by negligence of staff or staff errors with 15 (38.5%) respondents and then lastly inadequate skills of information and communication technology by the staff with 14 (35.9%) respondents.

Table 7. ICT Related Problems that Affects the Management of E- Resources

S/N	Variables	Frequency (Yes)	Percentage	Frequency (No)	Percentage
1	Power failure	26	66.7%	13	33.3%
2	Inadequate ICT facilities	24	61.5%	15	38.5%
3	Poor network	28	71.8%	11	28.2%
4	Poor storage media	21	53.8%	18	46.2%
5	Obsolescence of software	19	48.7%	20	51.3%

Table 7 shows the challenges faced by the FUNAAB Library that are related to ICT facilities in the management of electronic information resources whereby the highest challenge is poor network with 28 respondents which is equivalent to (71.8%) followed by power failure with 26 respondents that stands for (66.7%) then inadequate ICT facilities that were suggested by 24 respondents (61.5%) and then poor storage media with 21 (53.8%) respondents and lastly obsolescence of software which has 19 (48.7%) respondents respectively. Thus, these are problems that affect the library in the management of electronic information resources.

Table 8 Solutions to the Above Identified Challenges.

S/N	Variables	Frequency (Yes)	Percentage	Frequency (No)	Percentage
1	Provision of adequate power	26	66.7%	13	33.3%
2	Provision of adequate ICT facilities	24	61.5%	15	38.5%
3	Provision of good network	28	71.8%	11	28.2%
4	Provision of good storage media	21	53.8%	18	46.2%
5	Provision of up to date software	19	48.7%	20	51.3%
6	Recruiting qualified staff	24	61.5%	15	38.5%
7	Staff training and development	30	76.9%	9	23.1%

Table 8 indicates ways of tackling the challenges as the highest among the variables is the issue of staff training and development with 30 (76.9%) respondents, followed by provision of good network with 28 (71.8%) respondents and then provision of adequate power supply with 26 (66.7%) respondents followed by provision of adequate information and communication technology facilities and that of recruiting qualified staff that will manage the resources with 24 (61.5%) respondents each, the next is the provision of good storage media whose respondents were 21 (53.8%) and finally, the provision of up to date library automation software that can be used to successfully manage these electronic information resources with 19 (48.7%) respondents.

Findings and Recommendations

The strategies adopted by the library for the enhancement of the management of electronic information resources are library automation by using **KOHA** on online public access catalogue

Information and communication technology related problems that affect the management of electronic information resources in Federal University of Agriculture Library Abeokuta, Nigeria are poor network provision and erratic power supply, inadequate qualified staff, technical support by the staff are the major problems in the management of electronic information resources proper. The university library should provide network connectivity as well as an alternative power supply, recruiting qualified staff, proper staff training and development to improve the management of electronic information resources so as to satisfy the needs of library patrons as target customers of the library. There should be a policy as well as a strategic plan for ICT infrastructural development in the university library. This will provide an enabling environment for the organization and use of EIRS in the university Library and Digitization projects needs to be developed in the University library. These include integrated library automation, creation of standardized databases, digitization of theses and dissertations. Commitments to each of these projects will redefine and reinvent the university library for user-centered services.

User orientation programme should be improved in the university library so that the university community both staffs and students can access and make use of electronic information resources. In order to illuminate the resources available in the digital library, the library should establish an institutional archive and also view new arrival editions in the library. Formulate a sound 'collection growth strategy' for online knowledge services in particular. It is important to periodically update the preferred knowledge services, such as subject papers, reference books, and back volumes of journals, thesis/dissertation and research reports, bibliographies and reviews. It is important to upgrade electronic tools, such as CD-ROMs, online journals/e-journals, online full-text databases and e-books, and to regularly review their collection to assess the quality of information resources and infrastructure facilities. Although online journals and databases are on the verge of becoming a reality, the study recommends that document delivery and inter-library loan services be expanded internationally, so that academic and non-academic services are maintained.

Conclusion

In the 21st century is not a matter of how many volumes of books you have in the library but how many databases subscribed in the library therefore, the library are advised to keep pace with changes otherwise they will be left behind. Providing unlimited access to electronic information resources in the university library as well as keeping track of them is one way of keeping pace with change. The success of the university library in electronic resources provision depends on its ability to contend with the problems associated with the management of these e-resources. These problems are found to be linked with administrative policies or practices, staffing and e-resources provision using ICT; consequently the library management of this institution (FUNAAB) should therefore try its possible best to see that, these electronic information resources are managed accordingly in order to ensure proper utilization by the university community to satisfy their needs as target customers of the library.

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