INVESTIGATION OF LIBRARY AUTOMATION IN ACADEMIC LIBRARY: A CASE STUDY OF FEDERAL UNIVERSITY OYE-EKITI, EKITI STATE, NIGERIA

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Abstract

Library Automation is expected to embrace all the aspects of library operations and services. Most Nigerian academic libraries have not been able to fully automate all their services as a result of various factors. The need to identify the various aspects of library services and identify the factors affecting the implementation of automation in Academic Libraries informed the decision of the researchers to conduct this study. The study is significant to LIS study, Policy, theory and literature as it adds to literature on automation in Nigerian academic libraries. The design of the study was descriptive survey research. This study evaluated automation in the Federal University Oye-Ekiti library. The structured questionnaire was used to collect data from all staff working in the Library. Data obtained was analyzed using SPSS 15.0. The findings revealed that Library Staff have a high degree of awareness of library automation in the Library. It was also discovered that all aspects of library services have been partly automated Federal University Oye- Ekiti Library. In addition, it was also observed that the factors affecting the implementation of automation in the library includes lack of funds, lack of requisites skills etc. It was therefore recommended that Library staff should be encouraged to start experimenting with all the various modules embedded in the Library Management System for all library operations.

Key Words: Automation, Library Automation, Awareness, Library Management system, implementation

Introduction

Library automation presents new opportunities to all types of libraries including academic libraries to enhance their services. Some of the functions of libraries are changing in this present digital age and providing promising opportunities for the acquisition, organization and bibliographic control of the available vast knowledge. Abbas (2014) posited that the library is the heart of the educational enterprise

and also the reservoir of knowledge communicated through information resources. Information is fast becoming a vital national resource that determines the direction of any nation. Therefore, librarians must be conversant with development in information and its communication technologies for the organization and dissemination of information in order to increase knowledge and improve scholarship (Abbas, 2014).

Academic libraries play an important role in processing and providing information services to their users which comprises of students, faculties and researchers in order to support their teaching, learning and research needs. The present-day academic libraries are referred to as the nerve centers of institutions of higher learning where all academic activities revolved. There is a paradigm shift in academic library services with the advent of ICTs where the role and position of libraries has dramatically changed. Today, the contemporary practice in academic library services in the 21st century is being propelled with an information explosion, and the inclusion of ICTs in all aspects of library services. Ezechukwu & Adewole-Odeshi (2018) stressed that the 21st century academic library is one that is expected to be fully automated. This implies the computerization of all the routine housekeeping operations of the library including the maintenance of a functional and internet-accessible OPAC. Thus, the concept of library automation cannot be overemphasized. Automation have now offered academic libraries an exciting and challenging opportunities that requires them to respond positively in all facets of their services and functions if they are to remain relevant in the 21st century. Thus, academic libraries must devise means of survival, most especially, through library automation. (Ezechukwu & Adewole-Odeshi, 2018)

Library automation is the application of computers and utilization of computer-based products and services in the performance of different library operations and functions and providing various services and producing outputs. It implies a high degree of mechanization/computerization of various routine and repetitive tasks to be performed by human beings, thereby reducing human intervention to a great extent (Kemdarne, 2012). Library automation is also the application of ICTs to library operations and services (UNESCO, 2015). The automated library is internet-technology based. The rapid development of technology has seen improvements in communication links and a lowering of costs in accessing the World Wide Web. The implication of this is that the Internet is now more widely available to more people. As a result, many establishments have capitalized on its potentials to reach a wider audience with their services (Ilo, 2013). Automated libraries can also thus be used to reach all the potential library users without the library staff actually going out of the library.

Academic libraries are changing dramatically as they are now expected to provide to users a range of information and communication technologies necessary for retrieving information quickly from both immediate and remote databases, as well as creating a need for library cooperation and consortium

initiatives. The rapid development of technology has seen improvements in communication links and a lowering of costs in accessing the World Wide Web. The implication of this is that the Internet is now more widely available to more people. As a result, many establishments have capitalized on its potentials to reach a wider audience with their services (Ossai-Ugbah, 2010, Idiegbeyan-ose and Ilo, 2013). Automated libraries can also thus be used to reach all the potential library users without the library staff actually travelling out of the library. Suffice it to note here that the rate to which the automation process is completed however, varies between the developed and developing countries and, from one institution to another. Ossai-Ugbah (2010) opines that ignoring the potentials of this new technology for learning will even lead to institutions being less competitive and attractive to prospective students.

Okeoma & Egbe (2018) identified the following as reasons for library automation: facilitates bibliographic control, efficiency, expediency, accuracy, reduced workload and increased self-esteem of the library. Automation has a lot of benefits which apply to users, the staff and the library in general. The benefits according to UNESCO (2015) include: enhanced productivity/efficiency, better use of information resources through improved access, improved resource sharing through the virtual catalogue or network, reduced duplication of cataloguing effort, improved use of resources, improved customer services, improved image of the library, accurate production and evaluation of management information, optimized use of human and other resources, and facilitation of the acquisition of new skills and knowledge due to the adaption of modern technologies. One of the five laws of library science is to "save the time of the user". This is majorly made possible in an automated environment.

Abayomi (2017) posited that Automation makes it possible for librarians to accomplish tasks accorded to them within the shortest possible time as well as enhances their self-esteem and respect. Hence the need for adequate awareness among Librarians to aid their effective service delivery and satisfy the information needs of the users. Adegbore (2010) findings show that the problem of ICT is associated to dearth of professionally trained and unskilled staff in the two universities libraries studied. The findings further reveal that the level of short staffing is apparent while the little on ground have so little or no computer Knowledge and or awareness on library automation, which has posed a lot of technical problems to the automation exercise in the two libraries studied. Bajpai and Margam (2019) posited that it is thus clear that Librarians must first be aware, learn and adjust to a rapidly changing environment and acquire competencies and skills to become a knowledgeable asset to the library to actively perform on effective service delivery through automation. Library professionals then teach these skills to users and other supporting staffs enable them to search, navigate and find the right knowledge from a world of information.

According to Abbas (2014) there was an effort by academic libraries in Nigeria to catch up with their counterparts in the developed world and this can be seen in the way most university library automation in Nigeria started in the late 1980s and its various stages of development. Such efforts for automation at university level was made through the National Universities Commission (NUC), which introduced project aimed at computerizing services across the country. The pace has been very slow with none of the libraries fully automated. This development is discouraging particularly as the world has become a global village with avalanche of information to share but which may not be accessible without information technology. However, despite all these benefits, Nigerian universities are still at the crawling stage of the automation of their library services. The present scenario of inadequate funding of our universities and their libraries by both the federal and state Governments which are the proprietors of the institutions leave much to be desired. University funding has continued to dwindle since the mid- 1980s along with the downturn in the economic fortunes of Nigeria. However, based on the fact that automation of library services has been in Nigeria since the last three decades, and it was expected from the onset that, academic libraries would take the lead in the automation race because of their enormous potentials and challenges, experience and various researches have proved it otherwise. "Most academic and research libraries in Nigeria have not computerized any of their functions. Librarians, in the quest to make library resources available to enhance research, teaching and learning have resorted to automation. Librarians in Nigeria has adopted automation so as to address the varying need and preferences of patron, to make significant volumes of electronic resources available, to provide for users wishing to use library services remotely and also to improve inventory control method (mutual, 2012)

Some problems militating against library automation in Africa include expensive nature of the hardware, erratic power supply and lack of trained personnel. Similarly, other challenges affecting library automation in Africa include lack of adequate funding; lack of commitment from the government; paucity of qualified staff; inadequacies in existing ICT resources and lack of policies. (Egunjobi and Awoyemi, 2012, Ogbenege and Adetimirin, 2013 and Abdussalam and Saliu, 2014).

Statement of the Problem

The process of library services was completely manual before the adoption of Information Communication Technologies into librarianship. This made it tedious, slow, time consuming and prone to error and mistakes. Book order and the processing was completely manual resulting in longer time for newly acquired books to make its final journey to the shelf. Library users were denied quick and easy access to these materials. Filing of catalogue cards to ensure that all the library holdings are represented was very tedious as a lot of filing and refilling as needed to be done in order to incorporate new titles in

the catalogue. At the circulation unit, books loaned out could not be accounted for because of the voluminous book used for record keeping that one may need to search through. This process made library services unattractive to users because of the time wasted in getting information resources. (Ezechukwu & Adewole-Odeshi 2018). It is against this background that this study set out to investigate library automation in Federal University Oye-Ekiti Library, Ekiti State, Nigeria.

Objective of the study

The main objective of this study is to investigate library automation in Federal University Oye-Ekiti Library, Ekiti State, Nigeria.

The specific objectives were to:

1. ascertain the level of awareness of library automation by librarians in Federal University Oye-Ekiti Library;
2. examine librarians' perception of library automation in Federal University Oye-Ekiti Library.
3. examine the extent of library automation in Federal University Oye-Ekiti Library;
4. determine the factors affecting the implementation of automation in Federal University Oye-Ekiti Library and
5. assess the effect of effective service delivery by librarians on automation in Federal University Oye-Ekiti Library.

Scope of the study

Although, investigation of library automation in academic libraries is not limited to only academic libraries. The study covers Library staff working in the Federal University Oye-Ekiti Library. The study also covers the effect, awareness and Librarians perception of library automations.

Significance of the study

The outcome of the study is expected to provide evidence based data upon which relevant academic library automation policies can be formulated. The study also provides data that would inform budget allocation for ICT infrastructure development for library automation, human resource development and staffing for academic libraries in Nigeria. The study contributes to literature on the factors that influence the adoption and use of automated systems in academic libraries from a developing country such as Nigeria.

The study will be of great help to Management, staff of Federal University Oye-Ekiti as it will help them to know the effect of automation on the library operations and service delivery. It will also avail the library users to know the library automation services available at their disposal, various means by

which they can access the services. The recommendations of the study would guide the management of Federal University Oye-Ekiti library in making sound decisions. It will also help to increase the usage of e-resources available in the library.

The study will add to the existing literature available in relevant fields. It would also assist students that are interested in carrying out similar research in another community.

Methodology

A survey of Forty (40) Library staff in Federal University Oye-Ekiti Library was undertaken with the help of a well structured questionnaire written in English language. In the questionnaire administered for the study, close ended and open ended questions were adopted. This is because in the case of closed ended question, the nature of answering was streamlined so as to ensure that answers given would be relevant. However, some sections were open ended and the question has been framed to suit its purpose and hence the results are adequately important, useful and testable. Simple Random Sampling was adopted to collect the data, the researchers decided to use the total enumerative which cut across various categories of staff in the Library Out of the total 40 questionnaires distributed, only 39 valid questionnaires were received with a response rate of 98.5%. Data from the survey consisted of information pertaining to demographic information of the respondents; general information about the Library staff; Level of Automation; Librarians' perceptions of library; the extent of library automation; the factors affecting the implementation of automation; and the effect of effective service delivery by librarians on automation in Federal University Oye-Ekiti Library

Literature review

As observed by Abbas (2014), Automation is the reality of the 21st century and any library that ignores its capability to transform the information environment is at risk of losing grounds. Library automation may thus be distinguished from related fields such as information retrieval fields, automatic indexing and abstracting and automatic textual analysis. In short Library Automation means the use of computers to perform the different routines, repetitive and clerical jobs involved in the functions and services of the libraries. Library automation is described as the application of information communication technologies (ICTs) in the day to day operations of the library (Boateng, Agyemang&Dzandu, 2014).

In spite of various setbacks and experiences by libraries in Nigeria, some libraries still recorded success in their automation projects. For instance, Otunla and Akanmu–Adeyemo (2010) recounted automation process of Bowen University Library, Iwo and explained that as a result of automation, library

operation and provision of information are enhanced and images of Librarians boosted. The authors further reported that library users preferred automated system to manual system.

Also Gbadamosi (2012) stated that there is a wide gap between level of automation and computerization of university libraries in Nigeria. Most of the library automation software comes with different modules that can cater for all the library operations previously performed manually. Surprisingly, some libraries found it difficult to use all the modules. Research has shown that libraries mostly used the cataloguing modules and circulations modules while acquisitions and serials modules are rarely used. Otunla and Akanmu-Adeyemo (2010) testified that automation has enable users to access the OPAC and e resources anywhere within and outside the University environment thereby enhancing the provision of library services.

Oyekale (2018) investigated Integrated Library Systems (ILS) in use in university libraries in Osun State, Nigeria. It is a descriptive survey. All National Universities Commission (NUC) of Nigeria accredited universities in Osun State were selected for the study. The findings of the study indicated 70 of the surveyed libraries have been automated. 90% of the automated libraries adopted KOHA Integrated Library System while 10% adopted VIRTUAL. 14.28% libraries have been fully automated while 85.71% libraries are at advance stage of automation. The study also revealed reasons for which libraries adopted a particular integrated library system to include: comprehensive functionality; library standards compliant; popularity among libraries in Nigeria; technical feasibility and support; web-based interfaces; freedom to change support company or its vendor; being an open source, and upgradability. It recommends that libraries should cooperate together to share resources and experiences to overcome libraries' financial and skills limitations.

Abayomi (2017) posited that Automation makes it possible for librarians to accomplish tasks accorded to them within the shortest possible time as well as enhances their self-esteem and respect. Adegbore (2010) findings show that the problem of ICT is associated to dearth of professionally trained and unskilled staff in the two universities libraries studied. The findings further reveal that the level of short staffing is apparent while the little on ground have so little or no computer Knowledge, which has posed a lot of technical problems to the automation exercise in the two libraries studied.

Batool and Ameen (2010) studied the status of technological competencies of librarians at Punjab University. Their findings revealed that all librarians there had word processing skills but not very skillful in computer hardware expertise, that they knew how to use basic Internet functions but not advanced services, and that they had expertise in using web Dewey, OPAC, and MARC records. The researchers pointed out that lack of coverage in the curriculum, lack of refresher courses, and lack of training

workshops were major problems in learning of technology. Safahieh and Asemi (2010) also observed that the majority of librarians at Ispahan University, Iran did not have good computer skills. 46.3% regarded their level of skills as fair. None of the librarian perceived their level of skills as very good. However, 48.8% librarians got computer training from formal IT program. Their findings revealed that computer was used in libraries more often for circulation operation and then Internet online searching. The majority of the librarians believed that computers increase the efficiency of operations.

Chanetsa and Ngulube (2016) in their study indicated that respondents who are librarians possessed core skills which include presentation and Information literacy course design skills, reference and research skills, including information and search retrieval skills. Over a third of respondents believe that they needed new skills which includes web design, online cataloguing, classification, knowledge of HTML, virtual reference and online chats, knowledge of the use of mobile technologies like cell – phones and tablet in education, knowledge of the construction of subject portals in teaching, learning, research. Staff development is a significant issue in a changing library environment as well-equipped professional librarians are key resources to developing and maintaining a high-quality library. (Ajeemsha and Madhusudhan, 2012).

Various studies have mentioned the necessity of ICT skills for librarians. Hallam and Ellard(2015) study show that digital literacy represents a fundamental Foundation skill needed by library staff. Baro and Eze (2015) also investigated the level of ICT, information literacy (IL)skills of librarians in Nigerian Colleges of Education (COE) in order to discover the challenges they face in acquiring these skills. The findings showed that librarians in the study zone rate their Information Literacy skills as average. Another notable study by Nkamneben, et al. (2015) examined the extent of ICT skills possessed by librarians in the universities in Anambra State, Nigeria. The findings reveal that Librarians in the universities in Anambra State are weakly skilled in ICTs.

Gbadamosi (2012) stated that there is a wide gap between level of automation and computerization of university libraries in Nigeria. This is as a result of some implementation challenges. Mulla and Chandrashekara (2010) findings shows that out of 102 respondents 13.73% of the libraries were not automated for reasons which varied from library to library such as lack of computer facility, financial problems, lack of trained manpower and inadequate library collection. Adequate funding seems to be the main barrier in library automation among others. Aramide and Bolarinwa (2010) corroborated the prevalence of these problems at the National Open University of Nigeria (NOUN), Ibadan Study Centre where they found that the major constraints hindering the use of audiovisual and electronic

resources include poor power supply, poor infrastructure, and lack of adequate skill, high cost, and unavailability.

According to Atanda (2018) there are many constraints to any kind of development in Nigeria. It is not an easy environment in which to move ahead for the following reasons which have hindered efforts to automate library services in Nigeria. Some of the challenges are:

Erratic Power Supply and an Inadequate National Power Grid.

The consequences of this problem cannot be overemphasized. Lack of available and affordable electric power is holding back economic development and crippling the country. This is a difficult problem to address, as a solution depends on governmental action, but in order to move ahead now libraries need to make arrangements for generators and back-up power so that servers can be run on a continual basis; the only way that information and communication technologies can be fully utilized in Nigeria in 2010. Erratic power supply can also result in the burning of some electronic components which cannot easily be replaced.

Low Bandwidth and Internet Connectivity Problems.

The lack of affordable Internet service providers and their inability to provide wide bandwidth and strong connectivity means that even if a library were ready to connect to the Internet super-highway they might not be able to count on enough bandwidth to effectively access and download the online resources. Internet service providers are not as numerous or reliable as the demand requires and the bandwidth is often narrow and the connections generally slow.

Lack of Trained Personnel for Sustainable Capacity Building.

Trained personnel are essential for any implementation of ICT to take place and be effectively sustained. There is a need to build on a framework of a well-trained information technology workforce. It is not enough to have trainers visit and give superficial training at great cost and then fly out without leaving some back-up capacity on the ground. Personnel problems can result from the sudden departure of the university computing expert as witnessed when an expert who had been handling a project on behalf of the university library left and was not replaced, causing a lack of continuity in the project; and lack of library personnel to understudy and follow the automation project to its conclusion.

Limited Financial Resources

The lack of adequate funding is a very critical problem for all libraries. University libraries are

often not getting the percentage of the University budget that NUC and other agencies mandate and so they are not able to carry out their ICT plans. The funding of print-based libraries requires funding but supporting digital or virtual libraries requires even more funding since they require the purchase and replacement of software, electronic databases and equipment as well as generators and fuel, VSATs and ISP fees in order to operate.

Lack of Co-operative Ventures

Cooperation and resource sharing is also crucially important as a way forward in times of economic constraints. NULIB (Nigerian Universities Library Consortium), a subcommittee of the Committee of University Librarians (CULNU), has worked to offer opportunities for the reduced purchase of electronic databases to Nigerian libraries. This is the kind of effort that needs to be strengthened in order for all libraries to move ahead in the quest to offer affordable new digital products to their own clientele.

Gbadamosi (2011) emphasized that Library service delivery that is manually based may no longer cope with ICT (information and communication technology)-driven society of the 21st century. Jayaprakash and Balasubramani (2011) in their study have emphasized that automation of library operations and services are essential for efficient functioning of the library and saving the library users' time. The study has investigated the Automation in University libraries in Tamil Nadu.

Ossai-Ugbah (2010) stated that it is desirable that library record-keeping and services be automated for three reasons:

1. Much of the work involves the accurate updating of records in files. The tasks involved are generally tedious, repetitive, mechanical in nature, and lend themselves to computerization, even though the records may be complex and arranged in complicated ways.

2. Automation is likely to improve cost-effective performance by increasing accuracy, by reducing the rate of increase in costs in labor-intensive activities, and by increasing effectiveness. It should become possible to do some tasks more thoroughly than levels of staffing usually permit with manual procedures, such as the regular claiming of unsupplied issues of periodicals, or by doing things that cannot in practice be done in paper files, notably searching for combinations of characteristics.

3. Automation permits decentralized access to records. A librarian in a branch library can verify the status of another without maintaining duplicate files, traveling to another department, or asking other staff to interrupt their work in order to find out. A user can check to see whether a book is out on loan without

traveling to the library to see whether it is on the shelf. Considerations of service, of cost, and of the humane use of staff all argue for the use of computers to ease the burden and to increase the effectiveness of handling library records.

From the forgoing, one can confidently say that accomplishing effective service delivery in academic libraries in Nigeria is all about availability and accessibility of Library automation. It also involves availability of useful information, and connectivity of individuals, libraries and social networking. These are purely information communication technology issues that can facilitate learning because the business model either involves storage of very useful information, or enables people to connect and discuss in real time.

As identified by Susan and Baby (2012) in their study, most of the librarians agreed with the positive aspects of ICT listed in the study. Majority of the librarians agreed that ICT application make possible speedy access to up to date information, enhances the quality of library services, assists to increase knowledge and skills of librarians, and develop the status of library with more than 90% positive responses. The librarians also agreed that ICT use improves communication (80.5%), enhances job satisfaction (78.9%), encourages integration inside the library (68.1%), and reduces workload (66.5%). Of the two negative listed items, the item "ICT disturbs routine work of the library", only 10.8% agreed and majority 77.3% was against this concept. Also, the item "ICT affects regular budgeting provision", 18.4% agreed and63.2% disagreed. Therefore, it was obvious that librarians have positive attitude towards the utilization of information communication technology services in libraries.

After examining through various studies on library automation; it is found from the study that library automation and related discipline has contributed to the national economy and the betterment of the library professionals of developing countries particularly Nigeria by reducing the workload and to provide better and quick service to the library users. The present review study, which covers significant studies on library automation conducted in Nigeria certainly helped to narrow and to more clearly delineate the research plan, in conducting research on library automation in federal University Oye-Ekiti environment. Similarly, these reviews also helped in determining the degree of library automation in Library and Information Science field that have already been undertake.

Data Analysis and Presentations

Demographic Variables of the Respondents

A total of 40 copies of questionnaire were distributed to the respondents who are the staff of in Federal University Oye-Ekiti Library, 39 copies were received and valid for analysis. This gives a response rate of 98.5%.

Table 4.1: Distribution of the Respondents by Gender

Sex	Frequency	Percent
Male	21	53.8
Female	18	46.2
Total	39	100.0

Table 4.1 illustrates the distribution of the respondents by their gender. Out of the total 39 respondents, the majority, 21 (53.8%) respondents were males while 18 (46.2%) respondents were females.

Table 4.2: Distribution of the Respondents by Years of Experience

Years	Frequency	Percent
0 – 5 years	10	25.6
6 – 10 years	25	64.1
11 – 15 years	4	10.3
16 – 20 years	0	0
21 and 30 years	0	0
31 and above years	0	0
Total	**39**	**100.0**

Table 4.2 shows the distribution of the respondents by years of experience. Out of the total 39 respondents the majority, 25 (64.1%) respondents has between 6 - 10 years of experience, 10 (25.6%) respondents

have between 0 - 5 years of experience, while 4 (10.3%) respondents has between 11 - 15 years of experience.

Table 4.3: Distribution of the Respondents by Level

Level	Frequency	Percent
Senior Librarian	2	5.1
Librarian 1	2	5.1
Librarian 2	8	20.5
Assistant Librarian	12	30.8
Graduate Librarian	6	15.4
Library Officer	9	23.1
Total	**39**	**100**

Table 4.3 illustrates the distribution of the respondents by Level. Out of 39 respondents, 12 (30.8%) respondents are Assistants Librarians, 9 (23.1%) respondents are Library Officers, 8 (20.5%) respondents are Librarian 2, 6 (15.4%) respondents are Graduate Librarians while 2 (5.1%) respondents each are Senior Librarians and Librarian 1.

Table 4.4: Distribution of the Respondents by Academic qualification

Academic Qualification	Frequency	Percent
N.D	1	2.6
H.N.D.	1	2.6
B.LIS	26	66.7
M.LIS	9	23.1

PhD.	2	5.1
Total	**39**	**100.0**

Table   4.4

shows the distribution of the respondents by Academic Qualification. Out of the total 39 respondents the

majority, 26 (66.7%) respondents have B.LIS, 9 (23.1%) respondents have M.LIS, 2 (5.1%) respondents

have PhD, while 1 (2.6%) respondents each have N.D and H.N.D.

4.3   Presentations of Answer to Research Questions

Research Questions 1: What is the level awareness of library automation by librarians in Federal University Oye-Ekiti Library?

1. How automated is your library?

Table 4.5: Level of Automation in FUOYE Library

Level of Library Automation	Frequency	Percent
Fully Automated	17	43.6
Partly automated	22	56.4
Not Automated		
Total	**39**	**100.0**

Table 4.5 illustrates that Out of the total 39 respondents the majority, 22 (56.4%) respondents agreed that

FUOYE Library is partly automated, while 22 (56.4%) respondents say that FUOYE Library is fully

automated.

2. Is your library presently using an Automated Library Management System?

Table 4.6: Automated Library Management System

Automated Library Management system use	Frequency	Percent
Yes	36	92.3
No	3	7.7
Total	**39**	**100.0**

Table 4.6 shows that Out of the total 39 respondents the majority, 36 (92.3%) respondents agreed that FUOYE Library uses an Automated Management System while 3 (7.7%) respondents indicated that FUOYE does not use an Automated Management System.

3. What type of Library Management System is your Library using currently?

Table 4.7: Type of Library Management System

Type of Library Management system	Frequency	Percent
Open Source software	37	94.9
Proprietary software	0	0
Free Software	2	5.1
Indigenous Software	0	0
Total	**39**	**100.0**

Table 4.7 shows that Out of the total 39 respondents the majority, 37 (94.9%) respondents agreed that FUOYE Library makes use of Open Source software, while 2 (5.1%) respondents indicated that FUOYE LIbrary makes usse of Free Software.

4. What is the level of awareness of library automation by librarians in Federal University Oye-Ekiti Library?

Table 4.8: Awareness of library automation by librarians in Federal University Oye-Ekiti Library

Awareness of Library Automation	Frequency	Percent
Fully aware	12	30.8
Partly aware	27	69.2
Not aware	0	0
Total	**39**	**100.0**

Table 4.8 shows that Out of the total 39 respondents the majority, 27 (69.2%) respondents are partly aware of Automation in FUOYE Library, while 12 (30.8%) respondents are fully aware of Automation in FUOYE.

Research Question 2: What are the librarians' perceptions of library automation in Federal University Oye-Ekiti Library?

Question: As opposed to traditional system, automation makes information retrieval very easier and faster.

Table 4.9: Librarians' perceptions of library automation in Federal University Oye-Ekiti Library

Librarians Perceptions	Frequency	Percent
Agree	30	76.9
Disagree	3	7.7
Undecided	6	15.4
Total	**39**	**100.0**

Table 4.9 shows that Out of the total 39 respondents the majority, 30 (76.9%) respondents agreed that automation makes information retrieval very easier and faster, 3 (7.7%) respondents disagreed while 6 (15.4%) are undecided

Research Question 3: What is the extent of library automation to library services in Federal University Oye-Ekiti Library?

Table 4.10: The extent of library automation in Federal University Oye-Ekiti Library

S/N	Automation Library management services	SA	A	SD	D	Mean	Standard Deviation
1	Cataloguing	9 (23.1%)	28 (71.8%)	2 (5.1%)		3.18	.506
2	Serials	1 (2.6%)	33 (84.6%)	4 (10.3%)	1 (2.6%)	2.87	.468
3	Acquisition	12 (30.8%)	26 (66.7)	1 (2.6%)		3.28	.510
4	Reference	4 (10.3%)	33 (84.6%)	2 (5.1%)		3.05	.394
5	Circulation	14 (35.9%)	17 (43.6%)	4 (10.3%)	4 (10.3%)	3.05	.944

6	OPAC	20 (51.3%)	15 (38.5%)	3 (7.7%)	1 (2.6%)	3.38	.747

Table 4.10 shows the extent of library automation to library services in FUOYE Library. This is measured by the services carried out by the automated Library Management System. Out of the total 39 respondents the majority, 37 (94.9%) respondents agreed that Library automation support the cataloguing services of the Library, 34 (87.2%) respondents also agreed that Library automation support the Serials services of the Library, 38 (97.5%) respondents also indicated that the Library automation support the Acquisition services of the Library, 31 (79.5%) respondents agreed that Library automation support the Circulation services of the Library and 31 (79.5%) respondents also indicated that Library automation support the OPAC services of the Library

Research Question 4: What are the factors affecting the implementation of automation in Federal University Oye-Ekiti Library?

Table 4.11: The factors affecting the implementation of automation in Federal University Oye-Ekiti Library

S/N	Factors affecting the implementation of library automation	SA	A	SD	D	Mean	Standard Deviation
1	Lack of funds	30 (76.9%)	6 (15.4%)	3 (7.7%)		3.69	.614
2	Lack of requisite skills	22 (56.4%)	11 (28.2%)	5 (12.8%)	1 (2.6%)	3.38	.815

#		SA	A	D	SD	Mean	Std
3	Management bureaucracies	13 (33.3%)	25 (64.1%)		1 (2.6%)	3.28	.605
4	Lack of awareness of existing standards	12 (30.8%)	25 (64.1%)	2 (5.1%)		3.26	.549
5	Inadequate workforce	18 (46.2%)	21 (53.8%)			3.46	.505
6	Poor internet facilities	28 (71.8%)	9 (23.1%)	2 (5.1%)		3.67	.577
7	Lack of resources	19 (48.7%)	19 (48.7%)		1 (2.6%)	3.44	.641
8	Lack of maintenance	25 (64.1%)	12 (30.8%)	2 (5.1%)		3.59	.595
9	Lack of commitment by staff	13 (33.3%)	24 (61.5%)	2 (5.1%)		3.28	.560
10	Staff Training Deficiency	11 (28.2%)	24 (61.5%)	4 (10.3)		3.18	.601

Table 4.11 shows the various factors affecting the implementation of library automation in FUOYE Library. Out of the total 39 respondents, 36 (92.3%) respondents agreed that Lack of funds is one of the factors affecting the implementation of library automation, 33 (84.6%) respondents agreed that Lack of requisite skills is one of the factors affecting the implementation of library automation, 38 (97.4%) respondents agreed that Management bureaucracies is one of the factors affecting the implementation of library automation, 37 (94.9%) respondents also agreed that Lack of awareness of existing standards is one of the factors affecting the implementation of library automation, 39 (100%) respondents agreed that Inadequate workforce is one of the factors affecting the implementation of library automation, 37 (94.9%)

respondents agreed that Poor internet facilities is one of the factors affecting the implementation of library automation, 38 (97.4%) respondents agreed that Lack of resources is one of the factors affecting the implementation of library automation, 37 (94.9%) respondents agreed that Lack of maintenance is one of the factors affecting the implementation of library automation, 37 (94.9%) respondents agreed that Lack of commitment by staff is one of the factors affecting the implementation of library automation and 35 (89.7%) respondents agreed that Staff Training Deficiency is one of the factors affecting the implementation of library automation

Research Question 5: What is the effect of effective service delivery by librarians on automation in Federal University Oye-Ekiti Library?

Table 4.12: The effect of effective service delivery by librarians on automation in Federal University Oye-Ekiti Library

S/N	Effect of effective service delivery by librarians on automation	SA	A	SD	D	Mean	Standard Deviation
1	Access to information captured in multi-media	20 (51.3)	16 (41.0)	3 (7.7)		3.44	.641
2	Accessibility from any convenient location	6 (15.4)	30 (76.9)	2 (5.1)	1 (2.6)	3.05	.560
3	Shared infrastructure	6 (15.4)	30 (76.9)	3 (7.7)		3.08	.480
4	Self-service	11 (28.2)	25 (64.1)	3 (7.7)		3.21	.570
5	Seamless integration into virtual work environments	13 (33.3)	16 (41.0)	5 (12.8)	5 (12.8)	2.95	.999

6	Application programme interface (API's)	9 (23.1)	22 (56.4)	8 (20.5)		3.03	.668
7	Resource sharing	18 (46.2)	12 (30.8)	5 (12.8)	4 (10.3)	3.13	1.005
8	Real-time online communication	27 (69.2)	8 (20.5)	4 (10.3)		3.59	.677
9	Personalized products	23 (59.0)	10 (25.6)	5 (12.8)	1 (2.6)	3.41	.818
10	Personalized alerting services	11 (28.2)	20 (51.3)	8 (20.5)		3.08	.703
11	Embedded multi-media in documents	21 (53.8)	12 (30.8)	6 (15.4)		3.38	.747
12	Integration with mobile technologies	18 (46.2)	19 (48.7)	2 (5.1)		3.41	.595
13	Integrated/Single search across several/all platforms	14 (35.9)	24 (61.5)	1 (2.6)		3.33	.530
14	Harvesting of identities	11 (28.2)	23 (59.0)	5 (12.8)		3.15	.630
15	Harvesting of content	23 (59.0)	14 (35.9)		2 (5.1)	3.54	.600

16	Direct access to research data	17 (43.6)	21 (53.8)	1 (2.6)		3.41	.549
17	Data and workflows into cloud infrastructure	15 (38.5)	21 (53.8)	3 (7.7)		3.31	.614
18	Cloud-based storage	13 (33.3)	17 (43.6)	8 (20.5)	1 (2.6)	3.08	.807
19	Automated statistics on tap	19 (48.7)	20 (51.3)			3.49	.506
20	Fully integrated library back-office functions	21 (53.8)	12 (30.8)	3 (7.7)	3 (7.7)	3.31	.922

Table 4.12 shows the various effect of effective service delivery by librarians on automation in FUOYE Library. Out of the total 39 respondents, 36 (92.3%) respondents agreed that Access to information captured in multi-media is an effect of effective service delivery by librarians on automation in FUOYE Library, 30 (77.0%) respondents agreed that Resource sharing is an effect of effective service delivery by librarians on automation in FUOYE Library, 35 (89.7%) respondents agreed that Real-time online communication is an effect of effective service delivery by librarians on automation in FUOYE Library, 33 (84.6%) respondents agreed that Fully integrated library back-office functions is an effect of effective service delivery by librarians on automation in FUOYE Library, 37 (94.9%) respondents agreed that Harvesting of content is an effect of effective service delivery by librarians on automation in FUOYE Library and 36 (92.3%) respondents agreed that Self-service is an effect of effective service delivery by librarians on automation in FUOYE Library.

Discussion of the Findings

1.	The result of the finding revealed that majority of the staff in the FUOYE Library are males, it further revealed that majority of the Library staff has between 6 - 10 years of experience, the result of the finding equally revealed that majority of the Library staff are Assistants Librarians and majority of the Library staff academic qualification is B.LIS.

2.	The result of the finding revealed that majority the Library staff agreed that Library automation of cataloguing services, Serials services, Acquisition services, Circulation services and OPAC services of the Library is very important as agreed by Abbas (2014) who agreed that the automation process commenced in this direction in the academic libraries as the Researcher University of Ibadan, Nigeria. Automation of cataloguing, Serials, Acquisition, Circulation and OPAC services is also very essential as it speeds up the process for library materials to get to the shelves on time and minimizes the problem of document location. The result of the finding also revealed that In the FUOYE Library, cataloguing services, Serials services, Acquisition services, Circulation services and OPAC services have been fully automated. The finding is in sync with a similar study by Abbas (2014) who revealed that University of Ibadan have fully automated cataloguing module, with acquisition and serials partially implemented while reference and circulation are still at proposal stage.

3.	The result of the finding revealed that majority of the Library staff agreed that FUOYE Library is partly automated which implies that not all the services have been automated, majority of the Library staff agreed that FUOYE Library uses an Automated Management System, Majority of the Library staff agreed that FUOYE Library makes use of Open Source software, majority of the Library staff are partly aware of Automation in FUOYE Library, majority of the Library staff agreed that automation makes information retrieval very easier and faster.

5.	The result of the finding revealed that majority of FUOYE Library staff agreed that Lack of funds, Lack of requisite skills, Management bureaucracies, Lack of awareness of existing standards, Inadequate workforce, Poor internet facilities, Lack of resources, Lack of maintenance, Lack of

commitment by staff and Staff Training Deficiency are all factors affecting the implementation of library automation in FUOYE Library. The problems of automation however goes beyond the ones studied as Emezie and Nwaohir (2014); Mishra, Thakur, and Singh (2015); and Athanasius (2018) identified lack of infrastructure facilities, insufficient power supply, poor funding, poor administrative support and inadequate staff training as problems of automation.

6. The result of the finding revealed that majority of FUOYE Library staff agreed that Access to information captured in multi-media, Resource sharing, Real-time online communication, Fully integrated library back-office functions, Harvesting of contents and Self-service are the effect of effective service delivery by librarians on automation in FUOYE Library.

7. The result of the finding revealed that majority of FUOYE Library staff agreed that automation makes information retrieval very easier and faster. Adegbore (2010) finding shows that 70% of the research population attested to the assumption that as opposed to traditional system, automation makes information retrieval very easier and faster, thus, the author advised that it is incumbent that Nigerian university libraries be automated. Eyo and Nkanu (2011) also acknowledged that the processing of the list of books/journals for subscription by acquisition librarian is faster and accurate with computers.

Conclusion

One of the laws of library science states that the library is a growing organism states one of the laws of Library Science (Bhatt, 2011). The implication of this is that Library and Information Science is a profession that is dynamic and always open to change. The era of the switch from pure book based services to web-based services through automation has come to stay. There is the need for academic libraries to embrace this change and reflect it in their services.

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