

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

2021

Challenges and Facilitating Factors of Automation in Federal University of Technology Owerri Library

Judith Chioma Nwosu

Federal University of Technology, Owerri, judith.nwosu@futo.edu.ng

Doris Chinyere Obiano CLN

Federal University of Technology, Owerri, obianodoris@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Scholarly Communication Commons](#)

Nwosu, Judith Chioma and Obiano, Doris Chinyere CLN, "Challenges and Facilitating Factors of Automation in Federal University of Technology Owerri Library" (2021). *Library Philosophy and Practice (e-journal)*. 7013.

<https://digitalcommons.unl.edu/libphilprac/7013>

**Challenges and Facilitating Factors of Automation in Federal University of Technology
Owerri Library**

Judith Chioma Nwosu

judith.nwosu@futo.edu.ng

ORCID ID: <https://orcid.org/0000-0001-7057-3558>

University Library - ICT Unit

Federal University of Technology, Owerri

Nigeria

Dr. Doris Chinyere Obiano CLN

obianodoris@gmail.com

University Library – Rare Collections Unit

Federal University of Technology, Owerri

Nigeria

Abstract

The culture of library automation is dully practiced in some academic libraries in Nigeria while, in some others it is not. This study focuses on Challenges and Facilitating Factors of Library Automation in academic libraries in Nigeria using FUTO Library as a case study.

Survey research design was used for this study. Data was collected using a four-point structured online (due to COVID-19 protocols) rating scale tagged “Challenges and Facilitating Factors of Library Automation in FUTO Library”, with 38 weighted questions. A population of 100 FUTO Library staff, composed of para-professional and support staff was used as respondents for the study.

The findings of the study show that FUTO Library is automated, but certain sections/units of FUTO Library are not automated. Its automated resources are underutilized by its users. It experiences certain challenges in library automation, such as lack of staff training in ICT related skills and epileptic power supply, amongst others.

The study recommends that in FUTO Library: there should be an up-to-date automation of all resources and materials of the important users-oriented sections/units. There should be proper sensitization and use of effective selective dissemination of information (SDI) tools by its staff to create awareness on automation services to its users, to eradicate the problem of underutilisation of its resources and materials. The managements of FUTO Library and FUTO should ensure that some of the challenges the library face in automation of resources is solved with stringent measures such as: enhanced staff training, frequent power supply, etc.

Keywords: Library, Library automation, Challenges, Facilitating factors, Federal University of Technology, Owerri (FUTO).

Introduction

There are several services that libraries and by extension academic libraries like Federal University of Technology Owerri Library render to users, these services ranges from physical services to digital services. Before the advent of ICT, library services were operated with a traditional Integrated Library Management System (ILMS), but as technology advanced, library resources and certain services began to assume a new look of expansion; the use of automation came in and many libraries began to appropriate it in the services they render. In this period of great technological growth, innovations, and the adoption of Information Communication Technology (ICT), the level of automation grew and with this, the services of the library are broadened. As Otubelu (2011) noted, “the advent of ICTs has completely transformed libraries and information centres. They have emerged as early adopters of new technologies and act as service points for access to digital libraries. This has also helped the library to reach a wider user coverage and by so doing improved the value of its resources”. In line with Akanwa and Udo-Anyanwu (2017) who noted that library has taken a new connotation because of the advent of new technologies in the library. Baro, Eze & Nkanu (2012) posited that Information professionals have a crucial role to play in guiding and training users to help them find and use high-quality (both free and purchased) e-resources.

“Library Automation is a process, which involves linking computers electronically within and outside the institution, entering library resources in a database to create an Open Access Catalogue, which allows users to access and retrieve information in a timely manner”, (Nkhoma-Wamunza, 2003). Library automation is one of the digital services that an academic library offers, and it is a crucial part of a digital library because, it creates a platform for users to discover and access a library’s E-resources, such as books, journals, periodicals, textbooks etc. Library automation as well reduces the workload of library staff, because of the computerized services it renders to users.

A library that sees it as an obligation to ensure an up-to-date automation of their resources would go a long way in solving a great part of the challenge that running a digital library brings especially in academic libraries such as FUTO Library. A challenge that is found on the part of users, which is the dissatisfaction of users.

The adoption of a digital library in libraries in Nigeria is still in progress, this is because of the challenges that come with running a digital library, as well as the late adoption of ICT in libraries in Nigeria. Therefore, there is a problem of lack of and/or up-to-date library automation in academic libraries in Nigerian Universities at large. In most academic libraries in Nigeria such as Nnamdi Azikiwe Library of University of Nigeria Nsukka, Kenneth Dike Library of University of Ibadan, Federal University of Technology Owerri Library and some others, there is a quality automation of resources and services to a reasonable extent, while in some, the level of automation of resources and services is less encouraging. This implies that the culture of library automation is dully practiced in some academic libraries in Nigeria to retain the relevance of the library and to ensure that the available resources are not under-utilized. While some other academic libraries experience the problem of how efficient, solution-based, and up to date their library automation is.

It has been observed that FUTO Library as an academic library in Imo State Nigeria is currently advancing the services they render to its users through its E-resources, automation of resources and digital services. Unlike, other higher institutions that is in the same state, such as Imo State University Library, Alvan Ikoku Federal College of Education, and Federal

Polytechnic Owerri Library, FUTO Library is ahead in digital library services, automation and so on.

This study focuses on FUTO Library because it is one of the libraries in Nigeria that operates a digital library, therefore it will be beneficial to find out more about their automation services. The study sets to find out if FUTO Library is fully automated and to know what sections/units of FUTO Library resources and services are fully automated. It also sets to discover the challenges FUTO Library experience in automation and factors that can facilitate FUTO Library automation (solution to these challenges).

Objectives

The objectives of this study are as follows:

- To find out if FUTO Library is automated.
- To understand the importance of library automation in FUTO Library.
- To identify the sections/units of FUTO library that are fully automated.
- To know the level of utilization of these sections/units automated resources and materials.
- To find out the challenges FUTO Library faces in its automation.
- To identify factors that can facilitate library automation in FUTO Library.

Literature Review

Definition of Terms

Library

Library is a place where print and non-print materials are kept for reading, consultation, and study. Nwosu and Asuzu (2021) noted that “the library is the most important body of an institution of learning and the warehouse for storage of information concerning all human activities.” There are many types of libraries, such as: public libraries, special libraries, school libraries, academic libraries and so on.

An academic library is a type of library located in institutions of higher learning with the aim to serve the teaching, learning and research needs of students, faculty members and staff of the institution. Nwosu (2000) posited that the academic library may be described as the singular most important resource in the pursuit of the general goals and objectives of the institution of higher learning, and because of the different services it renders to its users. An institution without a library is considered incomplete. According to Pelekelo and Hamooya (2015), academic libraries are repositories of wisdom of great thinkers of the past and the present; they are social institutions charged with the responsibility of disseminating knowledge to the people without any discrimination; they provide access to scholarly resources that support intellectual inquiry, knowledge creation, and lifelong learning for the students and faculty of the university/college, the citizens of the State, and the broader scholarly community. Therefore, the importance of a library in an academic environment cannot be overlooked or overemphasised.

Automation

Automation simply means the application of technologies to deliver services with minimal human intervention.

“Automation, when used in a library context, refers to the computerization or mechanisation of all library activities” (Sharma, 2013). Automation ensures an easy working experience and as well saves human power and time. As Tabusum, Saleem & Batcha (2013) noted, “automation means the application of machines to perform the different routines, repetitive and clerical jobs involved in functions and services of the libraries”.

Library Automation

Library automation is the computerization of library activities especially the house-keeping activities such as acquisition, cataloguing, circulation, serials control etc. According to Nkhoma-Wamunza (2003), “library automation is a process, which involves linking computers electronically within and outside the institution, entering library resources in a database to create an Open Access Catalogue which allows the users to access and retrieve information in a timely manner”.

Library automation is important, and it aids the academic library users better in fostering easy access and greatly facilitating teaching and learning process. As Asid (2020) noted, “automating a school or academic library is a way to restructure its functions and reinvents its services to serve the teaching and learning community more effectively. In this way, automating traditional library makes sense to connect and help students from various cultures to become more skilled information users and life-long learners where modernized library and information centre is properly planned and implemented”.

Library automation is fostered by virtual library, because according to Edom (2012): “in a digital or virtual library system, location, accessibility and consultation of information resources are done electronically through the net”.

Library automation is adopted in academic libraries for certain purposes, such as: to serve the academic library users’ teaching, learning and research needs anytime and anywhere, to ensure a smooth and speedy disposal of library services, enhance library storage and retrieval systems, create a readily available Online Open Access Catalogue (OPAC), ensure that the library’s traditional activities are mechanized, to fully utilize Information Communication Technologies (ICTs) in rendering library services, because of the advancement in technology and the way things are done. In line with Muniraj (2021) who noted that these days no user has time to search the required and relevant information from dense heap of information collection. They have no time to go shelve by shelve to pick up a book.

Background of FUTO Library

The Federal University of Technology, Owerri is the Oldest University of Technology in Nigeria, and it was established by Executive fiat with the appointment of the first provisional Council by Nigeria’s First Executive President, Shehu Shagari, in 1980. FUTO opened its doors to staff and students as a university on November 28, 1980, in the premises of the Old Government Technical College.

FUTO Library was established alongside its parent institution in 1981. Its current sitting capacity is 1632. It was located at Lake Nwaebere in Aladinma Owerri but has now relocated to its

permanent site at Ihiagwa, Owerri West on 12th May 1993. FUTO library kicked off as a makeshift library in a classroom block, with the employment of professional and other para-professional staff and with Mr. J. C. Anafulu of blessed memory as the Pioneer University Librarian. At the time it had about 2,500 volumes as at the time of opening. It started as a traditional library, offering library services to users in a traditional manner. But, as time advanced and ICT began to be adopted by libraries in Nigeria, FUTO Library as well keyed in during mid-2005.

The services of the library became automated in 2006 and they adopted ALICE FOR WINDOWS Online Public Access Catalogue (OPAC) as its Integrated Library Management Software (ILMS). After about nine years of using ALICE FOR WINDOWS and experiencing certain challenges, in July 2015 the library adopted the demo of another OPAC software called ALEXANDRIA; it became appropriated in 2016 and it is still in use today.

Currently, FUTO Library has three large buildings which house different sections of the library, they are:

1. The main Library, it is the user's services area where books are kept for reading, consultation and borrowing.
2. Research Library or Library Phase II: this building house the Serial's collections unit, Acquisition unit, Processing unit (for cataloguing) and other sub-units.
3. E- Library, where the University Librarian's office is located, as well as the ICT unit and other sub-units.

FUTO Library has 146 staff presently, consisting of 46 Professional staff, 40 Paraprofessional staff, 44 Library Assistants and 16 Clerical staff. The library opens for duties by 8am from Monday to Friday and closes by 6pm because they run shift duty. The library collections are over 60,000 volumes including e-resources, books, and serials materials. The sub-units in the library are responsible for different library services such as:

- Users' services/Circulation Unit – in charge of the main library where the users come to read, borrow books, and get reference services, etc.
- Serials Unit – this is where the serials collections are kept for documentation and consultation.
- Processing Unit – in charge of cataloguing and classification of newly acquired resources in the library.
- Acquisitions Unit – orders for books and receives newly ordered resources, accessioning and documentation of new books.
- Other units in FUTO Library are as follows:

Rare Collections Unit, Documents Unit, Reprography Unit, Gifts and Exchange Unit, Research, Training and Statistics Unit, Institutional Repository Unit, Bibliography Unit, Innovative Unit, Embedded Services Unit, Information Communication Technology (ICT) Unit.

Benefits and Objectives of Library Automation in Academic Libraries

The objectives of library automation are very beneficial to an academic library. Maintaining an up-to-date library automation can help to achieve the following:

1. Large storage and Record Keeping: one of the benefits of library automation is enabling a good ground for online storage of library resources and record keeping. With library automation, limitless storage of a library's books, journals, periodicals, bibliographic citations, abstracting and indexing of other useful resources are captured and stored in a mechanized reliably durable manner.
2. Availability of an Online Public Access Catalogue (OPAC): with the use of a reliable and functional Machine-Readable Catalogue (MARC) protocol, cataloguing of the library's resources is made easier and fast. This fosters large storage which automatically appears in the Online Public Access Catalogue (OPAC). As Sharma (2013) noted, "the module performs various cataloguing tasks such as original cataloguing using the Machine-Readable Catalogue (MARC) Protocol, editing, copying, saving, and retrieving catalogues record. When a record is saved in the cataloguing database, the record automatically appears in the OPAC, and a brief copy of the record is also generated automatically for the circulation module".
3. Bibliographic details provision: library automation ensures that there is an up-to-date provision, retrieval and management of bibliographic records and indexes. The traditional method of retrieval which is time consuming and energy sapping is resolved with a computerized method of doing things.
4. Saving time and energy: librarians have always faced the challenge of fatigue and stress engaging in long hours of services especially circulation services to users which sometimes leads to lack of satisfaction of all users, due to lack of time and space. But with library automation, many services that the academic library render is made automatic for users whose satisfaction is a core objective. However, "the computers have the capability for overcoming these difficulties with the speed and data storage facilities", (Tabusum, Saleem & Batchas 2013).
5. Simple Library management: as Das and Chatterjee (2015) posited, "Information explosion has resulted in the production of many literatures in every field of knowledge. Accordingly, the print documents are coming to the library in huge numbers which is not possible for a library to manage the collection manually". Hence, the need for library automation that would bring about an easy and simple management of the academic library's materials and information resources. A computerised method of doing things ensures ease and speed.
6. Ensuring the proper use of library resources: as many print materials are published every day, and the library being at the forefront of the reception, storage and making available such resources to its users, it began to experience the problem of underutilization of its resources. This is because we are in an era of great technological advancement where many users no longer come to the library to search through shelves to retrieve materials. Users prefer E-materials to print materials, and by so doing, the library's resources are not maximally utilized and accessed by users. Library automation is there to stand in the gap and ensure that the library's resources can be accessed anytime and any day by users to ensure a proper utilization of the library's resources.

7. Fostering networking and inter-library relationship: libraries especially academic libraries engage in inter-library loans, gifts and exchange and communication. An automated library fosters this relationship between libraries in a more organized way
8. Ensuring a smooth and fast delivery of library services: in an automated library, the workload of librarians is reduced, there is a smooth and fast delivery of services because the computer provides vast services and processes information much faster than a human can and thereby ensures better workflow in the library. Library automation is enabled with internet, and this facilitates fast delivery of library services, as Akanwa and Udo-Anyanwu (2017) noted: “the internet is very useful as a communication tool among librarians and library clientele”.

Certain Challenges of Library Automation in Academic Libraries

Some of the challenges of library automation in academic libraries are as follows:

1. Lack of proper planning before the adoption of library automation and haphazard or inefficient implementation of the automation tools.
2. Use of a poor or non-result-oriented Automation Software.
3. Inadequate staff training in ICT related skills to equip them with the right technology skills to run a great automation of library resources efficiently and effectively.
4. Use of a weak Online Public Access Catalogue (OPAC) for online cataloguing of the library’s e-resources.
5. Lack of the needed automation facilities and tools.
6. Lack of adequate funding by the government and institutions’ management.
7. Lack of reliable power supply.

Factors that can Facilitate Library Automation in Academic Libraries

Some of the factors that facilitate library automation are:

1. Proper planning and implementation: before the adoption and appropriation of library automation, there should be proper planning and evaluation of the core needs of the library, and then implementation. Proper planning and systems evaluation when duly implemented is paramount for library automation to effectively function.
2. Identification and use of a suitable software: one of the first step to take in implementing library automation in academic library is to identify a suitable software for automation. Every software has its own advantages and disadvantages. But it should be selected keeping in mind the need of the organization, (Das & Chatterjee, 2015). This would go a long way in ensuring that the library’s resources are wonderfully automated.
3. Staff training: In an academic library, the academic librarians have more involvement in running an automated library, and as such should be duly trained especially in ICT skills, to equip them with the right skills to render such services. As Nkhoma-Wamunza (2003) stated, “a key factor to successful and implementation of library automation, its effective use in the management and delivery of planned services are trained staff and technical personnel to guide both implementation and effective use”.

4. A strong and reliable OPAC software: bearing in mind that its OPAC is the greatest reflection of the library's automated resources, the automation team should ensure the selection and use of a strong and reliable OPAC software for an effective and up-to-date automated service to users. There are different OPAC software, such as Alice for Windows, AUTOLIB, CALIBAN, LIBASOFT, LIBRARIAN, ALEXANDRIA etc.
5. Adequate funding: automation of the library requires large funds without funds automation cannot fully take place. This is because it is with funds that the automation team can purchase the resources and tools that would be used for the automation.
6. Provision of the needed automation facilities and tools: it is the duty of the institution management and government to ensure that academic libraries' needs are provided, and their resources updated through due consultations, to ensure an efficient service to its users.
7. Adequate supply of electricity: without electricity, a virtual/digital library cannot function. It is crucial that the problem of lack of adequate power supply be tackled to always ensure a proper and up-to-date automation of the library resources. As Nwosu & Obiano (2021) noted, "Nigeria as a country continues to face the problem of inadequate power supply. This has ridiculed some of the activities a country with an effective power supply should appropriately function in."

Methodology

Survey research design was used for this study. Data was collected using a four-point structured online rating scale tagged "Challenges and Facilitating Factors of Library Automation in Federal University of Technology, Owerri, Library" which is made up of two sections; Section A and Section B; where Section A has questions bordering on the respondents' personal information, such as gender, position, work section and educational qualification/rank. While, Section B has thirty-eight (38) well-thought questions bordering on the six research questions for this study.

The point of decision is fixed at 2.5 since the questionnaire is four-point scale. Any item that attracted a mean of 2.5 and above was regarded as accepted, while any item that attracted a mean of less than 2.5 was regarded as rejected. Data collected from the questionnaire was analyzed using simple mean frequency distribution.

Formula = mean = $x = \frac{\sum f \times x}{n}$

Where X = mean

\sum = summation

X = score of each response

n = total number of responses

Strongly Agree = 4 points

Agree = 3 points

Disagree = 2 points

Strongly disagree = 1 point

Population of Study and Research Design

The population of the study is made up of 130 FUTO Library staff comprising of 46 professional staff, 40 paraprofessional and 44 support staff (library assistants) who were selected as respondents for the study. The 16 clerical staff were not used as respondents because they are not directly involved in core library functions. The questionnaire was administered to staff who were available at the period of the research, which is 100 staff.

Findings

Gender:

Male – 20

Female 80

Educational Qualification:

PhD – 10

MLIS/M.Sc. – 21

BIIS/B.Sc. – 39

Others – 30

Sub-units of Respondents:

Users' services/Circulation Unit - 17

Serials Unit – 10

Processing Unit - 8

Acquisitions Unit - 6

Rare Collections Unit - 4

Documents Unit - 3

Reprography Unit - 3

Gifts and Exchange Unit - 3

Research Training and Statistics Unit - 8

Institutional Repository Unit - 5

Bibliography Unit–5

Binding – 4

Innovative Unit – 8

Embedded Unit - 4

Information and Communication Technology (ICT) Unit - 12

Table 1: Information on if FUTO Library is automated

S/NO	ITEMS	SA	A	D	SD	Σfx	N	X	Decision
1.	There is an up-to-date automation of FUTO Library resources	17 68	40 120	50 100	3 3	291	100	2.9	Accepted
2.	FUTO Library has a working automation section where	42 168	50 150	8 16	0 0	334	100	3.3	Accepted

	users access automated resources with computers								
3.	FUTO Library automation is hosted on servers and computers	10 40	78 234	12 24	0 0	298	100	3.0	Accepted
4.	FUTO Library automation is purely online based	3 12	17 51	80 160	0 0	223	100	2.2	Rejected
5.	FUTO Library automation is both online based and computer based	0 0	90 270	10 20	0 0	290	100	2.9	Accepted
6.	It has a web-based platform where automated resources can be accessed by users without visiting the library	12 48	76 228	12 24	0 0	300	100	3.0	Accepted
	Grand Mean	336	1053	344	3	1736	600	2.9	Accepted

Table 1 shows the information on if FUTO Library is automated. The result revealed that FUTO Library is automated. The first, second, third, fifth and sixth items on table 1 are on the level of satisfaction with the mean of 2.9, 3.3, 3.0, 2.9 and 3.0 respectively, while the fourth item is on the level of dissatisfaction with the mean of 2.2. The result showed that FUTO Library is automated, and the automation is not purely online based. A grand mean of 2.9 showed a high response on the items.

Table 2: Information on how important library automation is in FUTO Library.

S/NO	ITEMS	SA	A	D	SD	Σfx	N	X	Decision
7.	Library automation is an important service of the FUTO library	78 312	22 66	0 0	0 0	378	100	3.8	Accepted
8.	It serves as a bridge between users and the traditional library	19 76	81 243	0 0	0 0	319	100	3.2	Accepted
9.	It has improved the library services rendered by FUTO Library	37 148	60 180	3 6	0 0	334	100	3.3	Accepted
10.	It enables FUTO Library serve users better	37 148	60 180	3 6	0 0	334	100	3.3	Accepted
11.	It makes the user's access to Information materials easy.	48 192	48 144	4 8	0 0	344	100	3.4	Accepted

Grand Mean	876	813	20	0	1709	500	3.4	Accepted
------------	-----	-----	----	---	------	-----	-----	----------

Table 2 shows the information on how important library automation is in FUTO Library. The result revealed that Library automation is important in FUTO Library. The first, second, third, fourth and fifth items on table 2 are on the level of satisfaction with the mean of 3.8, 3.2, 3.3, 3.4 and 3.4 respectively. A grand mean of 3.4 showed a high response on the items.

Table 3: Information on sections/units of FUTO Library that are fully automated.

S/NO	ITEMS	SA	A	D	SD	Σfx	N	X	Decision
12.	FUTO Library resources are fully automated	4 16	35 105	55 110	6 6	237	100	2.4	Rejected
13.	The sections/units of FUTO Library that requires automation is fully automated	6 24	20 60	68 136	6 6	226	100	2.3	Rejected
14.	Not all sections/units that require automation are fully automated	15 60	73 219	6 12	6 6	297	100	3.0	Accepted
15.	The Acquisition unit resources are fully automated	0 0	9 27	82 164	9 9	200	100	2.0	Rejected
16.	The Processing unit resources are fully automated	0 0	20 60	65 130	15 15	205	100	2.1	Rejected
17.	The Circulation unit resources are fully automated	0 0	50 150	47 94	3 3	247	100	2.5	Accepted
18.	The Serials unit resources are fully automated	0 0	32 96	68 136	0 0	232	100	2.3	Rejected
19.	The Rare collections unit resources are fully automated	0 0	0 0	92 184	8 8	192	100	1.9	Rejected
20.	The Documents unit resources are fully automated	0 0	8 24	84 168	8 8	200	100	2.0	Rejected
	Grand Mean	100	741	1134	61	2,036	900	2.3	Rejected

Table 3 shows the information on sections/units of FUTO Library that are fully automated. The result revealed that not all sections/units of FUTO Library are automated. The first, second,

fourth, fifth, seventh, eighth, ninth and tenth items on table 3 are on the level of dissatisfaction with the mean of 2.4, 2.3, 2.0, 2.1, 2.3, 1.9, 2.0 and 2.3 respectively, while the third and sixth items are on the level of satisfaction with the mean of 3.0 and 2.5. A grand mean of 2.3 showed a low response on the items.

Table 4: Information on the level of utilisation of the sections/units automated resources and materials

S/NO	ITEMS	VHE	HE	LE	VLE	Σfx	N	X	Decision
21.	The Acquisition unit automated resources and materials	0 0	20 60	64 128	16 16	204	100	2.0	Rejected
22.	The Processing unit automated resources and materials	0 0	8 24	76 152	16 16	192	100	1.9	Rejected
23.	The Circulation unit automated resources and materials	0 0	9 27	88 176	3 3	206	100	2.1	Rejected
24.	The Serials unit automated resources and materials	0 0	0 0	92 184	8 8	192	100	1.9	Rejected
25.	The Rare collections unit automated resources and materials	0 0	3 9	80 160	17 17	186	100	1.9	Rejected
26.	The Documents unit automated resources and materials	0 0	2 6	90 180	8 8	194	100	1.9	Rejected
	Grand Mean	0	126	980	68	1,174	600	2.0	Rejected

Table 4 shows the information on the level of utilisation of the sections/units automated resources and materials. The result revealed that sections/units automated resources and materials are underutilised. The first, second, third, fourth, fifth and sixth items on table 4 are on the level of dissatisfaction with the mean of 2.0, 1.9, 2.0, 1.9, 1.9 and 1.9 respectively. A grand mean of 2.0 showed a low response on the items.

Table 5: Information on the challenges FUTO Library face in library automation

S/NO	ITEMS	SA	A	D	SD	Σfx	N	X	Decision
27.	Lack of staff training in ICT related skills	4 16	75 225	21 42	0 0	283	100	2.8	Accepted
28.	Epileptic power supply	60	37	3	0	357	100	3.6	Accepted

		240	111	6	0				
29.	Use of a weak OPAC for online cataloguing	32 128	68 204	0 0	0 0	332	100	3.3	Accepted
30.	Lack of sufficient funds	50 200	50 150	0 0	0 0	350	100	3.5	Accepted
31.	Lack of cooperation from Institution Management	40 160	50 150	7 14	3 3	327	100	3.3	Accepted
32.	Lack of automation facilities to serve users better	50 200	10 30	40 80	0 0	310	100	3.1	Accepted
	Grand Mean	944	870	142	3	1,959	600	3.3	Accepted

Table 5 shows the information on the challenges FUTO Library face in library automation. The result revealed that FUTO Library face certain challenges in library automation. The first, second, third, fourth, fifth and sixth items on table 5 are on the level of satisfaction with the mean of 2.8, 3.6, 3.3, 3.5, 3.3 and 3.1 respectively. A grand mean of 3.3 showed a high response on the items.

Table 6: Information on factors that can facilitate library automation in FUTO Library.

S/NO	ITEMS	SA	A	D	SD	Σfx	N	X	Decision
33.	Enhanced staff training in ICT related skills	93 372	7 21	0 0	0 0	393	100	3.9	Accepted
34.	Frequent power supply	90 360	7 21	3 6	0 0	387	100	3.9	Accepted
35.	A strong and reliable OPAC	85 340	15 45	0 0	0 0	385	100	3.9	Accepted
36.	Adequate provision of sufficient funds	80 320	20 60	0 0	0 0	380	100	3.8	Accepted
37.	Cooperation from Institution Management	80 320	20 60	0 0	0 0	380	100	3.8	Accepted
38.	Provision of the needed automation facilities for users	85 340	15 45	0 0	0 0	385	100	3.9	Accepted
	Grand Mean	2,052	252	0	0	2,304	600	3.8	Accepted

Table 6 shows the information on factors that can facilitate library automation in FUTO Library. The result revealed that certain factors can facilitate library automation in FUTO Library. The first, second, third, fourth, fifth and sixth items on table 6 are on the level of satisfaction with the mean of 3.9, 3.9, 3.9, 3.8, 3.8, and 3.9 respectively. A grand mean of 3.8 showed a high response on the items.

Discussion of Findings

The results presented in the previous section are discussed below:

FUTO Library is automated. It has a working automation section for users where its resources are hosted on servers and computers for the clientele's use. This is because of the importance of automation in libraries and the need for FUTO Library to meet the information needs of its users. This is in line with Asid (2020) who posited that "automating a school or academic library is a way to restructure its functions and reinvents its services to serve the teaching and learning community more effectively."

Library automation is important in FUTO Library because it serves as a bridge between users and the traditional library and has as well improved the library services rendered by FUTO Library to its user and parent institution at large. The importance of library automation cannot be overemphasised as Tabusum, Saleem & Batcha (2013) noted "Automation means the application of machines to perform the different routines, repetitive and clerical jobs involved in functions and services of the libraries".

Not all sections/units of FUTO Library that requires automation are automated. Sections like Circulation unit are considerably automated, while others like Acquisition, Processing, Serials, Documents and Rare collections units are either under automated or not automated at all.

The level of utilisation of the sections/units' automated resources and materials of FUTO Library is poor. This means that users underutilise the automated resources and materials as against Nkhoma-Wamunza (2003) who noted that, "library automation is a process, which involves linking computers electronically within and outside the institution, entering library resources in a database to create an Open Access Catalogue which allows the users to access and retrieve information in a timely manner".

FUTO Library face certain challenges in library automation, some of which are: lack of staff training in ICT related skills, epileptic power supply, use of a weak OPAC for online cataloguing, lack of sufficient fund, lack of cooperation from institution management, lack of automation facilities to serve users better.

Certain factors can facilitate library automation in FUTO Library, such as enhanced staff training, frequent power supply, a strong and reliable OPAC, adequate provision of sufficient funds, cooperation from institution management, provision of needed automation facilities for users.

Recommendations

From the findings of the study, it could be recommended that the following measures be taken to enhance library automation in FUTO Library:

- FUTO Library should improve its automation services and place more importance on library automation, since it is the most crucial part of a virtual library (the current trend).
- There should be an up-to-date automation of all resources and materials of the most important users-oriented sections/units of FUTO Library, such as Circulation, Acquisition, Processing, Serials, Documents and Rare Collections units, as well as some others if the need be, to ensure that quality service is rendered to users.
- There should be proper sensitization and use of effective selective dissemination of information (SDI) tools by FUTO Library staff to advertise its library resources and create awareness on automation services to its users, to eradicate the problem of underutilisation of FUTO Library resources and materials.
- The management of FUTO Library and FUTO institution management should work hand in glove to ensure that some of the challenges the library face in automation of resources is solved with stringent measures such as: enhanced staff training, frequent power supply, a strong and reliable OPAC adequate provision of sufficient funds, cooperation from institution management, provision of needed automation facilities for users.

Conclusion

Library automation makes library services easy and more coordinated. It is important for the virtual library services a library render. A library whose resources and materials are automated will remain relevant and experience no setback in the achievement of its set objectives.

In as much as adopting and operating a library automation in a Nigerian setting is highly tasking, expensive, and saddled with certain unavoidable challenges due to the facts that Nigeria is far behind in technology as a third-world country, has a dwindling economy and other factors. The importance and profitability of library automation, however, shouldn't be shoved under the carpet but rather valued and incorporated in every academic library to meet the information needs of users and parent institutions.

It is therefore relevant and crucial that every academic library automate their resources to serve its users more efficiently and as well retain its relevance in this period of great global technological advancement.

References

- Akanwa, P. & Udo-Anyanwu, J. A. (2017). *Information Resources in Libraries*. Owerri: Supreme Publishers.
- Asid, B. A. (2020). Library automation system of academic libraries: A multicultural Paradigm. *Jurnal Ilmu Perpustakaan dan Informasi*, 15(2), 234-262. ISSN: 1978-9637
- Baro, E. E., Eze, M. E. & Nkanu, W. O. (2012). E-library services: challenges and training needs of librarians in Nigeria. *Journal of OCLC Systems & Services*, 29(2), 101-116. <https://doi.org/10.1108/10650751311319304>
- Das, D. & Chatterjee, P. (2015). Library Automation: An Overview. *International Journal of Research in Library Science*, 1(1). 1-7. ISSN: 2455-104X
- Muniraj, A. (2021). Library automation – An introduction. *International Journal of Research in Library Science*, 7 (2), 192-198.
- Edom, B. O. (2012). *Principles of the use of library*. Owerri: Springfield Publishers Ltd.
- Nkhoma-Wamunza, A. G. (2003). Library automation: The role and significance of library automation: The role and significance of library automation plans. *Journal of Open University of Tanzania*, 5(1), 120-133. <https://doi.org/10.4314/huria.v5i1.33993>
- Nwosu, C. (2000). *A textbook in the use of library for higher education*. Owerri: Springfield.
- Nwosu, J. C. and Asuzu, C. M. (2021). Library services and information access in a time of pandemic: how are academic librarians in Nigeria carrying out library services? *Journal of Applied Information Science and Technology*, 14 (1), 95-106.
- Nwosu, J. C. & Obiano, D. C. (2021). Challenges of virtual library services in academic libraries of federal universities in South-Eastern Nigeria. *Research Journal of Library and Information Science*, 5(1), 13-21. <https://doi.org/10.22259/2637-5915.0501003>
- Otubelu, N. J. (2011). E-learning through digital libraries: The case of National Open University of Nigeria. *Journal of Library Philosophy and Practice*, 615. <https://digitalcommons.unl.edu/libphilprac/615>
- Pelekelo, L. and Hamooya, C. (2015). Preservation and conservation of library materials in academic libraries in Lusaka Province. *Journal of Library and Information Science*, 2 (1), 69-82.
- Sharma, S. (2013). *Library automation*. New Delhi: Excel Books Private Limited.
- Tabusum, S., Saleem, A. & Batcha, M. S. (2013). Impact of library automation in the development era. *Journal of Humanities and Social Sciences*, 17(5), 20-26. www.iosrjournals.org