4-19-2022

Evaluation of the Adoption and Use of Integrated Library Management Software in Selected Private University Libraries in Osun State, Nigeria

Sunday Olabisi Olatunji
Nile University of Nigeria, dcataloger@gmail.com

Mutawakilu Adisa Tiamiyu Prof.
University of Ibadan, Nigeria, mutatiamiyu@gmail.com

EVALUATION OF THE ADOPTION AND USE OF INTEGRATED LIBRARY MANAGEMENT SOFTWARE IN SELECTED PRIVATE UNIVERSITY LIBRARIES IN OSUN STATE, NIGERIA

BY

M.A. TIAMIYU (Phd)
Department of Data and Information Science, University of Ibadan

S.O. OLATUNJI
Nile University of Nigeria, Abuja

ABSTRACT

University libraries are expected to provide information resources and services to support the teaching and learning process of their institutions. For university libraries to deliver quality services, they are expected to continuously adapt to the changing institutional and global environments and requirements in use of current technologies to manage most or all library activities, particularly use of Integrated Library Systems (ILS). Furthermore, in the university libraries where ILS have been deployed, there is a need to carry out periodic evaluations of the systems. Hence, this study evaluated the adoption and use of integrated library software (ILS) in some selected private university libraries in Osun State, Nigeria.

Descriptive and correlational survey research design was adopted. The population comprised undergraduates and library staff of Adeleke University, Fountain University and Redeemers University. Slovin's formula was used to arrive at 384 as the target sample size of the undergraduates, while total enumeration was used for the sample size of the library staff since the population was small. Questionnaires were used for data collection. The data collected from the field were coded and analysed using the Statistical Package for Social Science (SPSS) software.

The findings revealed that majorities of the surveyed students were satisfied with the services provided through the ILS, except at the Adeleke University. Similarly, most of the students found the ILS easy to use and useful, the students except for the students of Adeleke University who were indifferent about the services, due to the fact that they were not using the services provided by ILS. This finding confirms that when selecting or upgrading software in libraries, the perceived usefulness and perceived ease of use should be main considerations. Finally, the study identified erratic power supply, lack of enough user education on the use of ILS services, internet network issues, lack of technical know-how, lack of technical facilities, and lack of training and re-training of staff as the major challenges faced by students and staff when using the ILS.

It was recommended that the management of Adeleke university library should improve on creating awareness among the library users for them to understand the importance of using the deployed ILS services. It was recommended that system deployment experts should be always consulted in order to configure deployed ILS modules to be user friendly.

Keywords*: University libraries, Integrated Library Management System, Library service evaluation, Private universities*

INTRODUCTION

A university library serves two complementary purposes of supporting the institution's teaching and learning curriculum, and supporting the research by the faculty and students. Omeluzor, et. al. (2012) stated that "the pursuit for excellence in all aspects of a university educational system made it imperative for universities around the world to rise up to their responsibilities". For a university library to deliver prompt and adequate services to the clients that will help in supporting the teaching, learning and research activities of its parent institution, it must continuously adapt to the changing institutional and global environments and use of current technologies to manage most or all library activities.

The ongoing rapid developments of Information and Communication Technology (ICT) has brought a lot of challenging issues to university systems and the academic libraries that support the systems). Libraries now understand the need to move from their traditional means of providing information to using integrated systems and networked operations. Recent trends in the information profession have also obligated academic libraries to embrace automation as a means of improving their service delivery to their clientele (Ukachi, Nwachukwu, and Onuoha, 2014). Lubanski (2012) defined automation as "the use of machines or technologies to optimize productivity in the production of goods and delivery of services". In order to achieve effective library automation, some of the university libraries are making use of home developed library software for individual library operations such as acquisitions, cataloguing or circulation control. Most common these days however is the use of integrated library management software to perform the various routine activities. Tella and Oladeji (2017) observed that Integrated Library Software (ILS) is an automated library system that is capable of managing the operations of many library functions.

In choosing ILS software, libraries must base their decision not only on the performance and efficiency of the system, but also on the ability of the software to enhance the productivity of the library (perceived usefulness), free of challenge when put into use (perceived ease of use), system quality, information quality, service quality, user satisfaction and challenges that might be encountered.

PROBLEM STATEMENT

The use of Integrated Library Software in the university libraries has clearly changed how the libraries are providing their various services to the users. For university libraries that have adopted and used a particular integrated library software, prompt evaluation of the software is expected in order to examine whether the software has been able to perform the task it was set out to achieve. Perceived usefulness, perceived ease of use and the challenges of the software are key in evaluating the software. Nevertheless, from the perspective of the entire university system of a country such as Nigeria, the choice, implementation and experiences of ILS by a university library usually needs to be researched periodically to answer some crucial questions. Finding answers to these questions requires a comprehensive system evaluation of the use of ILS in the universities. Evaluation of ILS is pivotal to ensure that the software is able to assist the university libraries to achieve their operations effectively and efficiently. Perceived usefulness and perceived ease of use are two constructs of Technology Acceptance Model (TAM) that can be used to determine whether the ILS is performing optimally.

Also, there have been several studies on the adoption and use of integrated library software (ILS) (Omeluzor, et. al., 2012; Uzomba, 2015; Kumar and Jasimudeen, 2012; Mulla and Chandrasekhara, 2010), but little studies have been done on the evaluation of ILS using the two constructs of Technology Acceptance Model (TAM). It is against this background that this study was set out to evaluate how ILS are being used and experienced in some selected Nigerian university libraries.

OBJECTIVES OF THE STUDY

The main objective of this study is to evaluate the adoption and use of integrated library software (ILS) in some selected private university libraries in Osun State, Nigeria. The specific objectives are:

i.   examine the perceived usefulness of ILS in the selected private university libraries from the perspectives of library users;

ii.   examine the perceived ease of use of ILS in the selected private university libraries from the perspectives of library users;

iii. assess the level of user satisfaction with the services provided to them through the ILS in the selected private university libraries;

iv.   find out the challenges being faced by the library users in the use of ILS in the selected private university libraries;

v.   identify strategies being used or planned to overcome the challenges being faced in the selected private university libraries;

LITERATURE REVIEW

According to Fabunmi (2002), a university library is an organized collection of information resources (print and non-print) which form an integral part of a tertiary institution. In essence, a university library provides resources to support the teaching and research activities of the parent institution. From the perspective of a university library as a building, Ogbuiyi and Okpe, (2013), defined university library as a place where academic information sources are acquired, organized, processed, stored and made available to meet the information needs of the students, teachers and other members of the university community.

The quality of the university library facilities is an important component in the reputation of the university. This can be seen from the study conducted by Ogunrombi (2003) on appraisal of status of library stock in Nigeria Universities Commission (NUC) the superintending agency for the Nigerian university' system. The Professional librarians on NUC's accreditation teams formed the accreditation team and they evaluated library stock in subject disciplines using the following criteria: quality (volumes), 'student. Population (users) and the currency of stock. The study details the accreditation status of subject disciplines in the first-degree programmes of most universities that were denied accreditation especially in the sciences because of poor library stock. Ajibero (2004) argues that if during accreditation exercise most university libraries scored less than 70%, while other components scored 100%, that programme will not get full accreditation

Hussaini, et.al. (2017) defined library services as those facilities in the library that enables librarians to perform their task diligently by providing clienteles with the readily available information at the right time and place to enable them to satisfy the information needs of the user. In order to provide effective library services, there is a need for periodic evaluation of these services.

Within the context of the library, Ogunrombi (2012), defined evaluation as the process whereby library systematically collect and analyse information about students' perceived use of libraries by using evidence (testing), numerical values to the evidence (measurement), and using the results to

make decisions (assessment). From the general view and library perspective of evaluation, it can be deduced that evaluation is majorly concerned with assessment of the level at which a service has been able to achieve its set objectives. Libraries have now embraced the modern ways of rendering effective library services through the use of integrated library management software. Kumar, (2013) defined an integrated library software as a system of keeping track of the operations of a library payroll, expenses, purchases, and most importantly, keeping track of the various media being checked out by the librarians. Omeluzor, et al. (2012), opined that integrated library software is designed to enhance all library routine activities as expected by the library users. A good and reliable ILS enhances management, control and easy access to information resources that are physical in a library and outside, for example, books, CD ROM, e-journal, e-books, e-databases, and repositories, among others. It also helps to reduce time wastage in the delivery of services to the library users. According to Breeding, (2012), Integrated Library System, or ILS, provides computer automation for all aspects of the operation of a library. These products are generally organized into modules that address specific functional areas. These modules include acquisitions (ordering, receiving and invoicing materials), cataloguing (classifying and indexing materials), circulation (loaning materials to patrons and receiving them back), serials (tracking magazine and newspaper holdings) and OPAC (public interface for users). The early generations of integrated library management systems were not user friendly and interactive. This made it difficult to use by library staff, though they were more efficient than the paper systems libraries had been using for generations. (Kinner & Rigda, 2019).

Ashikuzzaman, (2014) commenting on the advantages of an integrated library system opined that ILS helps to eliminate duplication of efforts of creating and maintaining multiple copies of bibliographic records, reduction in errors as a result of entering of records once and that library staff and patrons can have access to all pertinent information at one location in an integrated library system. It is worthy of note that even as enormous as the benefits that can be derived from the use of integrated library management systems in libraries, the process of the successful implementation of these systems is faced with many challenges. Mishra, Thakur and Singh (2015) highlighted some of these challenges to include lack of proper planning, sound budget, lack of awareness of standard format, and lack of skilled or trained manpower.

Tella and Oladeji (2017) focused on Empirical investigation on impact of Koha on library services in selected academic libraries in Nigeria. The population of the study comprises professional and

paraprofessional librarians in Ladoke Akintola University, University of Ilorin, Redeemer University, Adeleke University and Bowen University. The study showed that Koha has favourably impacted their libraries. Some difficulties encountered in implementing Koha were inadequate infrastructure and financial constraints. Uzomba et al. (2015) study on The Use and Application of Open-Source Integrated Library System in Academic Libraries in Nigeria: Koha Example. The purpose of the study was to examine the use of open-source integrated library systems in academic libraries in Nigeria, with the aim of highlighting the capabilities and potentials of open-source software (Koha) and its practical importance to academic libraries across the globe. The population of the study comprises twenty-five (25) staff selected randomly from 25 different higher institutions that use open-source software in Nigeria: 19 universities (federal, state and private), 4 polytechnics (federal and state) and 2 colleges of education. The result of the findings shows that many libraries in Nigeria and across the globe have turned more and more to free and open-source software. The major challenges confronting the libraries include: inadequate funding, inadequate managerial support, inadequate power supply, etc.

Ossai-Ugbah (2010) conducted a study on the impact of automated library services and usage on student's academic performance in Nigerian Universities. The purpose of the study was to examine the level at which use of automated electronic information services by students has influenced the academic performance of students in three tertiary institutions in Nigeria: University of Ibadan, Covenant University, Sango Ota and Ladoke Akintola University of Technology, Ogbomoso. The findings of the study show that students who use automated library services perform excellently well in academics better than those who did not make use of the services offered by an automated library. A large percentage of the users agreed that there is a significant correlation between educational academic exposures with the use of the automated library services, and also they derived satisfaction in the use of automated electronic library services. However, some of the major challenges encountered when using the automated library services were slow internet speed, no access to the automated library facilities when needed.

Akpokodje and Akpokodje (2015) in their study on Assessment and Evaluation of KOHA ILS for Online Library Registration at University of Jos, Nigeria. The purpose of the study was to evaluate the adoption of KOHA ILS for library online registration at the University of Jos Nigeria. The findings of the study show that KOHA was selected at the library out of necessity and not fully

planned for. It further enumerated the prospects and challenges faced by the staff involved in the registration processes. The survey also found that open-source ILSs are more cost effective than proprietary ILSs.

METHODOLOGY

The descriptive and correlational survey research design was employed for this study. The population of the study comprised all undergraduate students of Adeleke University, Ede (1,550); Redeemer's University, Ede (2,500); Fountain University, Osogbo (1,455). In determining an adequate sample size, the study adopted Slovin's formula (1967) as cited by Singh and Masuku (2014) for calculating sample size of known target population. Based on this formula, the sample size of the study was 384 respondents from the selected private universities. The study used quantitative methods and instruments for data collection. The data collection instrument that was used for this study was: a structured questionnaire for the students. Data was collected by personal administration and retrieval of copies of the questionnaires to respondents by the researcher. Data collected from the field was coded and analysed using the Statistical Package for Social Science (SPSS) software.

DATA ANALYSIS AND DISCUSSION OF FINDINGS

What is the perceived usefulness of ILS in the selected private university libraries from the perspectives of library users?

Perceived Usefulness of ILS in the selected institution libraries from the perspective of library users

Perceived Usefulness	Adeleke University (N = 108)					Fountain University (N = 65)					Redeemer's University (N = 167)				
	A	U	D	$\overline{x}$	STD	A	U	D	$\overline{x}$	STD	A	U	D	$\overline{x}$	STD
The Library ILS allows me to easily connect with the library from anywhere, anytime.	30 / 27.8%	58 / 53.7%	20 / 18.5%	3.23	0.947	55 / 84.6%	4 / 6.1%	6 / 9.2%	4.11	0.928	105 / 62.8%	41 / 24.6%	21 / 12.6%	3.73	1.132
The Library ILS helps me to search for needed information materials on the OPAC	46 / 42.6%	48 / 44.4%	14 / 12.9%	3.46	0.951	55 / 84.6%	8 / 12.3%	2 / 3.1%	4.17	0.747	135 / 80.8%	25 / 15.0%	7 / 4.2%	4.16	0.848
The Library ILS gives me access to e-resources relevant to my programme/course	39 / 36.1%	57 / 52.8%	12 / 11.1%	3.42	0.929	55 / 84.6%	8 / 12.3%	2 / 3.1%	4.16	0.739	131 / 78.4%	23 / 13.8%	13 / 7.8%	4.12	0.990
The Library ILS allows me to quickly speak to and get help from the librarians concerning the library materials and services that I need from time-to-time needs	38 / 35.2%	51 / 47.2%	19 / 17.6%	3.28	0.905	51 / 78.5%	10 / 15.4%	4 / 6.2%	4.07	0.814	111 / 66.4%	38 / 22.8%	18 / 10.8%	3.83	0.988
I can make book reservation on the library ILS from anywhere, anytime	44 / 40.8%	49 / 45.4%	15 / 13.9%	3.38	0.980	55 / 84.6%	6 / 9.2%	4 / 6.1%	4.11	0.857	81 / 48.5%	58 / 34.7	28 / 16.8	3.42	1.111
I get notifications of newly acquired information materials in the library through the ILS	32 / 29.6%	52 / 48.1%	24 / 22.2%	3.21	1.259	45 / 69.2%	15 / 23.0%	5 / 7.7%	3.91	0.955	69 / 41.4%	54 / 32.3%	44 / 26.4	3.28	1.303
I can renew loan materials on the library ILS	40 / 37.0%	47 / 43.5%	21 / 19.4%	3.34	1.081	45 / 69.2%	13 / 20.0%	7 / 10.8%	3.87	1.039	94 / 56.3%	50 / 30.0%	23 / 13.8%	3.61	1.159
I get to loan out information materials through the library ILS	31 / 28.7%	54 / 50.0%	23 / 21.3%	3.27	1.100	42 / 64.6%	14 / 21.5%	9 / 13.8%	3.70	1.079	77 / 46.1%	68 / 40.7%	22 / 13.2%	3.52	1.136
I return loan information materials through the library ILS	30 / 27.7%	52 / 48.2%	26 / 24.1%	3.18	1.026	44 / 67.7%	10 / 15.3%	11 / 16.9%	3.78	1.119	76 / 45.5%	64 / 38.3%	27 / 16.2%	3.44	1.152
The library ILS enhances my effectiveness in book searching	31 / 28.7%	56 / 51.9%	21 / 19.5%	3.24	0.991	50 / 76.9%	9 / 13.8%	6 / 9.2%	4.03	0.975	112 / 67.0%	33 / 19.8%	22 / 13.2%	3.81	1.187
I often gain access to important sites on the Internet and the Web through links provided by the ILS	32 / 29.6%	41 / 37.9%	35 / 32.4%	3.01	1.095	53 / 81.5%	8 / 12.3%	4 / 6.2%	4.16	0.846	109 / 65.2%	35 / 21.0%	23 / 13.8%	3.80	1.095
I derive good benefits from using the ILS to gain access to the ILS or catalogues of other libraries	26 / 24.1%	47 / 43.5%	35 / 32.4%	2.94	1.080	55 / 84.6%	7 / 10.7%	3 / 4.6%	4.14	0.833	101 / 60.4%	46 / 27.6%	20 / 12.0%	3.76	1.097
The quality of the e-resources I can access when I use the ILS is better	26	36	46	2.79	1.071	50	10	5	4.03	0.942	85	54	28	3.48	1.113

than the quality of the e-resources I usually get when I search the Internet directly	24.1%	33.3%	42.6%			76.9%	15.3%	7.7%			50.9%	32.3%	16.8%		
Weighted Mean			**= 3.21**					**= 4.02**					**= 3.69**		

Key: A = Agreed, U = Undecided, D = Disagreed, $\overline{X}$ = Mean, STD = Standard Deviation

Based on the findings it can be inferred that the students from Adeleke University are undecided about their perception of the Usefulness of ILS. This could be as a result of most of the students not haiving to make use of the library services provided by the ILS. Therefore, it becomes difficult for them to assess how useful they perceive it to be. However, the students from Fountain and Redeemers University showed a positive perception of the usefulness of ILS in the selected library. This is because they are seen to have used most of the library services provided by the ILS for several activities. The students from the both institutions perceived that the ILS was useful as it; helps them to search for needed information materials on the OPAC, gives them access to e-resources relevant to their programme/course; allows them to quickly speak to and get help from the librarians concerning the library materials and services that they need from time to time, enhances their effectiveness in book searching, give opportunity to make book reservation from anywhere and anytime at the ILS, and several other usefulness.

What is the perceived ease of use of ILS in the selected private university libraries from the perspectives of library users?

Perceived Ease of Use of ILS in the selected institution libraries from the perspective of the library users

S/N	Perceived Ease of Use	Adeleke University (N = 108)					Fountain University (N = 65)					Redeemer's University (N = 167)				
		A	U	D	$\overline{x}$	STD	A	U	D	$\overline{x}$	STD	A	U	D	$\overline{x}$	STD
1.	The user interface of the ILS is user-friendly	39 36.2%	51 47.3%	18 16.6%	3.46	1.088	55 84.7%	5 7.7%	5 7.7%	4.06	0.847	130 77.8%	30 18.0%	7 4.2%	4.07	0.841
2.	I find it easy to get locations of information materials through the OPAC	35 32.4%	46 42.6%	27 25.0%	3.05	0.980	52 80.0%	9 13.8%	4 6.1%	3.97	0.847	117 70.1%	44 26.2%	6 3.6%	3.97	0.790
3.	The ILS is flexible	27 25.0%	66 61.1%	15 13.9%	3.24	0.849	52 80.0%	8 12.3%	5 7.7%	3.95	0.805	104 62.3%	54 32.3%	9 5.4%	3.77	0.839
4.	My interaction with the ILS is clear and understandable	28 25.9%	67 62.1%	13 12.0%	3.22	0.756	53 81.5%	8 12.3%	4 6.2%	4.06	0.801	92 58.7%	52 32.2%	17 10.2%	3.72	0.928
5.	I get quick response from the librarian when using the ask-the-librarian link on the ILS	29 26.9%	58 53.8%	21 19.5%	3.15	0.924	52 80.0%	9 13.9%	4 6.2%	4.02	0.907	85 60.0%	60 35.9%	22 13.2%	3.52	1.075
6.	Access to e-resources on the ILS is easy	22 20.4%	58 53.8%	28 25.9%	2.94	0.964	54 83.1%	6 9.2%	5 7.7%	4.08	0.841	104 62.3%	48 28.8%	15 9.0%	3.79	0.944
7.	Making book reservation on the ILS is easier	25 23.1%	56 51.9%	27 25.0%	3.14	0.985	51 78.5%	12 18.5%	2 3.1%	4.15	0.755	93 59.2%	58 34.7%	16 9.6%	3.66	0.959
8.	Renewing of information materials on the ILS is stress-free	22 20.4%	52 48.2%	34 31.5%	2.92	0.818	48 74.0%	13 20.0%	4 6.1%	3.98	0.885	92 55.1%	57 34.1%	18 10.8%	3.63	0.941
9.	I spend less time when trying to loan book from the library through ILS	26 24.1%	52 48.2%	30 27.8%	3.06	0.964	51 78.4%	12 18.4%	2 3.0%	4.08	0.816	83 49.7%	64 38.3%	20 12.0%	3.56	1.019
10.	Returning of books through the ILS is cumbersome	27 25.0%	46 42.6%	35 32.4%	2.99	0.889	39 60.0%	17 26.2%	9 13.8%	3.65	0.986	56 33.6%	62 37.1%	49 29.4%	3.06	1.231
	Weighted Mean	= 3.12					= 4.00					= 3.68				

Key: A = Agreed, U = Undecided, D = Disagreed, $\overline{X}$ = Mean, STD = Standard Deviation

Based on the findings, it can be inferred that the students from Adeleke University are undecided about how they perceived the ILS to be easy to use. This could be due to the fact that the students do not make use of the library services provided by the ILS. Therefore, it becomes difficult for them to assess how easy to use they perceive the ILS used in the library to be. However, the students from Fountain and Redeemers University see the ILS used in the library to be easy to use. This is because they are seen to have used most of the library services provided by the ILS for several activities. They perceived the ILS to be easy to use as they revealed that; making book reservation on the ILS is easier, the user interface of the ILS is user-friendly, they spend less time when trying to loan book from the library through ILS, access to e-resources on the ILS is easy, their interaction with the ILS is clear and understandable, it easy to get locations of information materials through the OPAC, the ILS is flexible and lots more.

What is the level of user satisfaction with the services provided to them through the ILS in the selected private university libraries

S/N	User Satisfaction	Adeleke University (N = 108)					Fountain University (N = 65)					Redeemer's University (N = 167)				
		H	M	L	$\overline{x}$	STD	H	M	L	$\overline{x}$	STD	H	M	L	$\overline{x}$	STD
1.	Library Registration Service	35 32.5%	16 14.8%	57 52.8%	3.06	1.303	51 78.4%	11 16.9%	3 4.6%	4.14	0.759	100 59.8%	48 28.7%	19 11.4%	3.82	1.015
2.	Reference Service (ask-a-librarian)	31 28.7%	26 24.1%	51 47.2%	2.93	1.074	44 67.7%	16 24.6%	5 7.7%	3.89	0.770	109 65.2%	36 21.6%	22 13.2%	3.85	0.970
3.	Book Reservation Service	32 29.7%	24 22.2%	52 48.2%	2.97	1.255	38 58.5%	17 26.2%	10 15.4%	3.71	0.974	86 51.5%	55 32.9%	26 15.6%	3.65	0.945
4.	Online Public Access Catalogue (OPAC) Service	32 29.7%	17 15.7%	59 54.7%	2.71	1.200	46 70.8%	11 16.9%	8 12.4%	3.87	0.992	112 67.0%	31 18.6%	24 14.4%	3.93	1.059
5.	Self-Renewal of Information Materials Service	31 28.7%	19 17.6%	58 53.7%	2.81	1.334	43 66.2%	15 23.1%	7 10.8%	3.79	0.901	83 49.7%	40 24.0%	44 26.4%	3.50	1.178
6.	Loaning of Information Materials (Charging) Service	32 29.7%	17 15.7%	59 54.6%	2.79	1.308	37 56.9%	17 26.2%	11 17.0%	3.74	0.964	88 52.7%	37 22.2%	42 25.2%	3.59	1,171
7	Returning of Information Materials (Discharging) Service	33 30.5%	11 10.2%	64 59.2%	2.77	1.378	42 64.7%	14 21.5%	9 13.9%	3.77	0.938	90 53.9%	41 24.6%	36 21.6%	3.70	1.071
8.	Access to e-resources Service	33 30.6%	13 12.0%	62 57.4%	2.81	1.368	47 72.6%	11 16.9%	7 10.8%	3.94	0.931	100 59.8%	36 21.6%	31 18.6%	3.79	1.122
9.	Notifications on New Arrival (Current Awareness Service) Service	34 31.4%	11 10.2%	63 58.4%	2.82	1.371	42 64.6%	12 18.5%	11 16.9%	3.81	0.955	75 44.9%	52 31.1%	40 24.0%	3.43	1.134
10.	Connection to the ILS or electronic resources of other university libraries in Nigeria through provided links	36 33.3%	13 12.0%	59 54.6%	2.83	1.370	48 73.9%	9 13.8%	8 12.4%	3.90	0.979	73 43.7%	49 29.3%	45 27.0%	3.30	1.079
11.	Connection to the ILS or electronic resources of other university libraries abroad through provided links	36 33.3%	14 13.0%	58 53.7%	2.86	1.336	51 78.5%	7 10.8%	7 10.8%	3.95	0.693	73 43.7%	47 28.1%	47 28.2%	3.33	1.146
12.	Connections to websites of various faculty, departments and units of the university through provided links	33 30.5%	11 10.2%	64 59.2%	2.75	1.298	44 67.7%	10 15.4%	11 16.9%	3.84	1.059	78 46.7%	48 28.7%	41 24.6%	3.42	1.161
	Weighted Mean	**= 2.84**					**= 3.86**					**= 3.61**				

Key: H = High, M = Medium, L = Low, $\overline{X}$ = Mean, STD = Standard Deviation

Based on the finding, it can be inferred that the students in Adeleke University possess a low level of satisfaction with the services provided to them through the ILS in their library. This could be as a result of their level of usage or the reason why most of the students are seen to use it. Also, their level of satisfaction could be triggered by their indecision to the perceived usefulness and perceived ease of use of the ILS. However, the students from Fountain University and Redeemers University possess a high level of satisfaction with the services provided to them through the ILS in their library. This could be as a result of their level of usage, how they perceived it to be useful and easy to use. The high level of satisfaction was evidence as they revealed that they were satisfied with the; Library Registration Service, Reference Service (ask-a-librarian), Book Reservation Service, Online Public Access Catalogue (OPAC) Service, Self-Renewal of Information Materials Service, Loaning of Information Materials (Charging) Service Returning of Information Materials (Discharging) Service, Access to e-resources Service, Notifications on New Arrival (Current Awareness Service) Service, Connection to the ILS or electronic resources of other university libraries in Nigeria through provided links, Connection to the ILS or electronic resources of other university libraries abroad through provided links, Connections to websites of various faculty, departments and units of the university through provided links.

What are the challenges being faced by the library users in the use of ILS in the selected private university libraries?

Challenges being faced by the library users in the use of ILS in the selected institution libraries

S/N	Challenges	Adeleke University (N = 108)					Fountain University (N = 65)					Redeemer's University (N = 167)				
		A	U	D	$\overline{\text{X}}$	STD	A	U	D	$\overline{\text{X}}$	STD	A	U	D	$\overline{\text{X}}$	STD
1.	Erratic Power Supply	35 32.4%	49 45.3%	24 22.2%	3.31	1.169	49 75.4%	10 15.4%	6 9.3%	3.58	1.109	57 34.2%	36 21.6%	74 44.3%	2.86	1.415
2.	Lack of Support from Library Staff	36 33.4%	47 43.4%	25 23.2%	3.11	0.965	37 56.9%	11 16.9%	17 26.1%	3.73	1.148	39 23.4%	42 25.2%	86 51.5%	2.54	1.260
3.	Lack of enough user education on the use of ILS services	35 32.4%	50 46.3%	23 21.3%	3.27	1.082	41 63.1%	14 21.5%	10 15.3%	3.41	1.109	43 25.8%	50 30.0%	74 44.3%	2.74	1.275
4.	Unfriendly nature of the ILS user interface	21 19.4%	60 55.6%	27 25.0%	3.00	0.894	18 27.7%	13 20.0%	34 52.3%	2.60	1.155	35 21.0%	49 29.4%	83 49.7%	2.55	1.178
5.	Internet network issue	31 28.7%	48 444%	29 26.8%	3.15	1.106	39 60.0%	15 23.1%	11 16.9%	3.59	1.205	57 34.2%	36 21.6%	74 44.3%	2.85	1.343
6.	The OPAC takes too much time to returning results when conducting search	14 12.9%	63 58.3%	31 28.7%	2.83	0.853	13 20.0%	17 26.2%	35 53.8%	2.46	1.064	37 22.2%	66 39.5%	64 38.4%	2.76	1.206

Key: A = Agreed, U = Undecided, D = Disagreed, $\overline{\text{X}}$ *= Mean, STD = Standard Deviation*

Based on the findings, it can be inferred that the students from Adeleke University were Undecided about the challenges faced in the use of ILS. This could be attributed to the fact that they do not use the services provided by the ILS, thereby making it difficult to give an assessment of the challenges faced while using it. However, the students from Fountain University are faced with some challenges while using the ILS. The challenges they are seen to be faced with include; erratic power supply, lack of support from library staff, lack of enough user education on the use of ILS services, and Internet network issues. The students from Redeemers University do not face any form of identified challenges while using the ILS provided by their library. They are seen to have a smooth and seamless use of the ILS.

What are the strategies being used or planned to overcome the challenges being faced   in the selected private university libraries?

Strategies being used or planned to overcome the challenges being faced in the selected institution libraries from the library users perspective

S/N	Strategies	Adeleke University (N = 108)					Fountain University (N = 65)					Redeemer's University (N = 167)				
		A	U	D	$\overline{X}$	STD	A	U	D	$\overline{X}$	STD	A	U	D	$\overline{X}$	STD
1.	Alternative means of power supply should be provided	50 46.3%	44 40.7%	14 13.0%	3.74	1.130	50 76.9%	12 18.5%	3 4.6%	4.24	0.885	126 75.3%	30 18.0%	11 6.6%	4.28	0.966
2.	Library staff should be ready to provide support for users when using the ILS service	50 46.3%	45 41.6%	13 12.0%	3.62	1.015	58 89.2%	5 7.7%	2 3.0%	4.34	0.801	138 82.6%	20 12.0%	9 5.4%	4.28	0.937
3.	The library management should sensitize users on how to use the ILS service	47 43.6%	45 41.6%	16 14.8%	3.67	1.139	47 72.3%	15 23.0%	3 4.6%	4.17	0.985	133 79.5%	26 15.6%	8 4.8%	4.26	0.907
4.	The ILS modules should be designed to be user friendly	51 47.3%	37 34.3%	20 18.5%	3.59	1.111	54 83.1%	8 12.3%	3 4.6%	4.19	0.871	129 77.2%	27 16.2%	11 6.6%	4.16	0.990
5.	The library management should increase the internet bandwidth	51 47.3%	37 34.3%	20 18.5%	3.63	1.141	51 78.4%	10 15.4%	4 6.2%	4.14	1.006	125 74.8%	34 20.4%	8 4.8%	4.24	0.954
6.	The OPAC module should be improved upon to return results quick enough when searching	48 44.4%	38 35.2%	22 20.4%	3.52	1.157	48 73.8%	10 15.4%	7 10.8%	3.98	1.081	124 74.2%	33 19.8%	10 6.0%	4.20	1.019

Key: A = Agreed, U = Undecided, D = Disagreed, $\overline{X}$ = Mean, STD = Standard Deviation

Based on the findings, it can be inferred that students from the selected private Universities want the library to deploy some important strategies in order to overcome the challenges faced while using the ILS. These strategies are; Alternative means of power supply should be provided, Library staff should be ready to provide support for users when using the ILS service, the library management should sensitize users on how to use the ILS service, The ILS modules should be designed to be user friendly, the library management should increase the internet bandwidth, The OPAC module should be improved upon to return results quick enough when searching.

CONCLUSION

In measuring the effectiveness of software in libraries in Nigeria and around the world, perceived usefulness and perceived ease of use should be major variables to consider when evaluating the software.

This is because; based on the study, the more people understand the ILS to be useful for things necessary and important to do, the more they would use it to do such things, the more a person understands that using the ILS would be free of effort and flexible, the more they would use it. The TAM variables determine the level of satisfaction derived by users from the ILS services i.e., when the ILS is flexible, user-friendly, re-usable, adaptable and robust, the more they would be satisfied with ILS services provided for several important purposes.

Finally, perceived ease of use and perceived usefulness are very important and germane to the satisfaction level of users with the services provided by Integrated Library System so libraries should consider these variables when selecting software for use in the library.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made to ensure rendering effective and satisfactory library services through ILS:

1. Management of Adeleke University library should improve on creating awareness among the library users for them to understand the importance of using the ILS services.

2. The management of the university libraries faced with the challenge of erratic power supply should provide alternative means of power to avoid breakdown of systems when there is no power in the library.

3. Library staff should be ready to provide support for users when using the ILS service. This will help the users to be satisfied from the use of the ILS service.

4. The library management should organize a sensitization program like library orientation for the users to put them through on how to use the ILS service.

5. System and user interface design experts should be engaged to configure the ILS modules to be user friendly.

6. The library management should increase the internet bandwidth to improve the reliability of the internet network to students on the campuses.

7. The library management should provide the necessary technical facilities needed for the smooth running of the ILS.

8. When selecting software in libraries, the perceived usefulness and perceived ease of use, should be major criteria considered.

REFERENCES

Ajibero, M. I. (2004). Do not Support and Sustainability: The Experience of University Libraries in Nigeria. *Proceedings of Scaulwa 2003 Conference*.

Akpokodje, N. V. and Akpokodje, T. E. (2015). Assessment and Evaluation of KOHA ILS for Online Library Registration at University of Jos, Nigeria. *Asian Journal of Computer and Information Systems*, 3(1), 20-27.

Breeding, M. (2012). Open-Source Integrated Library Systems. *ALA Tech Source*. Retrieved 23 August, 2019 from http://www.alatechsource.org/ltr/open-source-integrated-librarysystems.

Fabunmi, B. A. (2002). *Planning the University Libraries for Effective Customer Services in Nigeria*.

Hussaini, S., Vashistha, R., Jimoh, A. O. and Jimah, H. (2017). Automation of Library Services for Enhanced Users' Satisfaction of Information Resources in Academic Libraries in Nigeria. *ResearchGate*. 1-10. Retrieved 26 August, 2019 from https://www.researchgate.net/publication/328928107

Idiegbeyan-Ose, J. and Esse, U. C. (2013). Students Satisfaction with Academic Library Resources and Services: The Covenant University Library Experience. *Journal of Information and Knowledge Management,* 4(1), 64-75.

Kumar, V. and Jasimudeen, S. (2012). Adoption and user perceptions of Koha library management system in India. *Annals of Library and Information Studies,* 59(4), 1-15.

Mulla, K.R and Chandrasekhara, M. (2010). Use of integrated library software: A survey of engineering college libraries in Karnataka. *International Journal of Information Science and Management*, 8(2), 100-113.

Ogbuiyi, S. U. and Okpe, I. J. (2013). Evaluation of Library Materials Usage and Services in Private Universities in Nigeria. *Kuwait Chapter of Arabian Journal of Business and Management Review,* 2(8), 33-41.

Omeluzor, S. U., Adara, O., Ezinwayi, M., Bamidele, A.I. and Umahi, F. O. (2012). Implementation of Koha integrated library management software (ILMS): the Babcock University experience. *Canadian Social Science*, *8*(2), 211-221.

Shrama, S. D. (2007). Library Automation Software Packages Used in Academic Libraries of Nepal: Comparative Study. Retrieved 23 August, 2019 from http://*eprints.rclis.org/22581/1/Sabitri%20final%20thesis.pdf*

Tella, A. and Oladeji, T. I. (2017). Empirical investigation on impact of Koha on library services in selected academic libraries in Nigeria. *Annals of Library and Information Studies,* 64, 113-115.

Ukachi, N. B., Nwachukwu, V. N. and Onuoha, U. D. (2014). Library automation and use of open-source software to maximize library effectiveness. *Information and Knowledge Management*, 3(4), 74-82. Retrieved 27th June, 2019 from http://www.iiste.org

Umoh, E. B. (2017). Information and Services Provision by Academic Libraries in Nigeria. *International Journal of Academic Library and Information Science*, 5(5), 153-159. Retrieved 27 August, 2019 from http://www.academicresearchjournals.org/IJALIS/Index.htm

Uzomba, E.C., Oyebola, O.J. and Izuchukwu, A.C. (2015). The use and application of open-source integrated library systems in university libraries in Nigeria: Koha Example. *Library Philosophy and Practice (e-Journal)*, *Paper 1250* (2015), 1–37. Retrieved 29th June, 2019 from http://digitalcommons.unl.edu/libphilprac/12