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Amuda H. O^{1,*}, Nwalo K. I. N.² and Onanuga A. O³ ¹The University Library, Fountain University, Osogbo, Nigeria. ²Department of Library and Archival Information Studies, University of Ibadan, Ibadan, Nigeria. ³The University Library, Osun State University, Osogbo, Nigeria.

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ABSTRACT

A survey method was employed to evaluate library computerization project at Ladoke Akintola University of Technology, Ogbomoso, Nigeria and University of Ilorin, Ilorin, Nigeria. Structured questionnaire and interview were the instrument adopted. The instrument were validated by pre-test analysis using Pearson Product Correlation; there was a strong reliability (0.92) of the instrument. A total number of 39 copies of questionnaires were administered to the library staff which were all completed and returned. Out Of 300 copies of questionnaires administered to users, only 277 were completed, returned and used for the study. The data generated was analyzed using descriptive statistics involving tables and percentages. The findings show that much progress has not been recorded by the libraries under study towards the effective automation of their libraries operations; information technology (IT) resources are inadequate and there was low percentage (32.1) of satisfied users. It was also discovered that the university libraries under this study were lagging behind in the pace of automation due to inadequate funding, inadequate IT resources, problem of software, lack of policy guidelines, lack of culture of evaluation to access performance of the computerized project and logistic problem. It can be concluded that some Nigeria University libraries are still on developing stride towards improving their IT profiles. Thus, it is recommended that periodic evaluation to assess performance of the computerized library projects services should be institutionalized within University libraries in order to continually improve the implementation, operation and cost-effectiveness of automated information services.

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Introduction

In Nigeria and indeed the whole of Africa and the third world countries, the computerization of library service is fast gaining ground. Innovations in computers and telecommunication technology have resulted in major challenges in basic library operations such as cataloguing and classification and collection management. Librarians must appreciate the fact that literacy in the use of computer technology facilitates the globalization of the economy, business, culture and other sphere that affect our daily lives (Ola 2002). It must be noted that the knowledge base, which users of university library want access to is no longer stored in the linear media textbooks, printed material base but rather in computerized electronic information domain (Madu 2004).

This clearly indicates that the future of academic libraries in Nigeria is tied closely with the information technology, IT. Despite the unprecedented revolution in library practice brought by IT, Nigeria, being a developing country, still has a long way to go in the pace of library automation due to some challenges which have far-reaching effects on the implementation and sustenance of the computerization of library services. In order to propose changes or improve on library services in Nigeria university libraries, there is need to evaluate the computerization project in the libraries.

Problem Statement

Despite some laudable initiative on library computerization to improve library services and operations in Nigeria universities, the technological transformation of some university libraries still appear to have been very low which is as a result of lack of culture of evaluation to access performance of the computerization library project. This implies that the set objectives of computerizing these libraries have not been fully met. The study therefore evaluates the library computerization projects in two universities in south western Nigerian, with the objectives to

1 identify the progress made by the selected university library towards achieving the objectives of its library computerization project.

2 determine the constraints to successful implementation of library computerization projects in the selected university libraries.

This study attempts to provide answers to the following research question:

1 What library services are being computerized in the university library?

2 What are the impacts of the library computerized services on the universities?

3 Are there adequate IT resources for successful implementation of the computerization project?



4 Are the library users satisfied with the automated services provided by thelibraries?

5 Are the computerized services provided by the libraries relevant to meet user's need.

6 What are the constraints to the successful implementation of the computerization projects?

The results of the study will highlight the state of the library automated services in the selected universities which could guide the library administrators on how to improve on the services rendered to the users.

Computer technology has been one of the major factors causing changes in the way people communicate, locate, retrieve, and use information(Murthy 1999). Libraries and information centers have embraced the technology more profoundly than many other fields, and most of them are currently using electronic products and services (Egberongbe 2003). Libraries were re-structured to accommodate information technology in library operation because of the belief that the success of a library can be measured by the extent of IT use by the library.(Chaya- Deri, 1997).Nwalo (2002) discussed a great deal on the compelling need for libraries in Africa to computerize their operations. He reported that as publishing goes more and more electronic in the 21st century, many primary journals and secondary services previously acquired by libraries through subscription to hard copies can only be accessed through the internet. As such, any library that is not linked to the internet would; as it were, be automatically isolating its users from the best of the world's current literature for higher education and research. Oketunji (2001) reported that the application of computers to library process is now firmly established in Nigeria libraries.

Fourie (2001) reported that university libraries are increasingly being called upon to provide more relevant, up-to date and timely information to a wide range of users. Egberongbe (2003) reported that library computerization in Nigeria university libraries is gaining ground. He stated that a number of academic institutions have introduced computers in their libraries. Industrial library became autonomous in its approach to computerization; this led to variations in the automation programmes of these libraries in terms of computer models, operating systems, language and software package (Madu, 2004).

Xie (2006) reported that a system is evaluated to ascertain the level of its performance or its value. performance or its value.Covi (2000) also pointed out that the evaluation of automated services in libraries is a complex undertaking, which is conceptually and pragmatically challenging.

Edem and Edem (2002) confirmed that quality services to a large extent depend on the organizational patterns adopted by the library. Mahe et al., (2000) studied how French scientists were using electronic journals in relation to the print versions, and found that discipline of the scientist, working environment, equipment, practice and promotional resources influenced usage of electronic journals. Performance or its value. Bertot *et al.*, (2006) stated that evaluative approaches tend to be tailored to particular needs of an organization; linked to available time and funding; limited by scope and breadth of application due to funding, planning, etc.

The aspects of library that can be subjected to evaluation according to Wilson (2005) are:

1 the way the management structure functions;

2 internal operations relating to information materials, such as cataloguing, classification and indexing, etc.

- 3 library/information services to users;
- 4 new programmes of service delivery;
- 5 new possibilities for technological support to services;
- 6 alternative possibilities for doing anything;

7 the functioning of a total system prior to planning change; etc. **Procedure**

This study was carried out during the 2009/2010 school year. It involved three set of respondent viz the university librarian, library staff and the library users drawn from different faculties of Olusegun Oke, Library, Ladoke Akintola University Technology, Ogbomoso and University of Ilorin's library, A survey method was employed for the study. The total population of the respondent was 224 which include 2 university librarians, twenty-two (22) library staff and two hundred (200) users. The data collection instrument used for this study was a questionnaire and interview. The instrument was structured to identify important measurable variables associated with the provision and utilization of library computerized services. A random sampling technique was adopted for the study. Out of 200 copies of questionnaire administered to the users, only one hundred and ninety two (192) were completed and used for the study. The data collected was analyzed using descriptive statistics involving tables and simple percentages.

Institution University	librarian	Library staff	Users
LAUTECH	1	10	100
University of Ilorin	1	12	100
Total	2	22	200

Table 2. Copies of questionnaire completed by th	e
respondents	

r	
Questionnaire library staff	Completed library staff
10	95
12	95
22	192
100	96
	Questionnaire library staff 10 12 22 100

Results

When the librarians were interviewed to identify the computerized task in their libraries, it was found out that LAUTECH library has only its cataloguing service automated while University of Ilorin has almost all its library services automated (Table 3). None of the library services is fully automated, however, services such as CD-ROM, internet search, on-line journal subscription etc are being provided to the user.

The study analyzed the IT knowledge of the library staff as well as their experience with library automated services. The result shows that 50% had low IT knowledge, 40.9% had moderate knowledge and 9.1% had higher IT knowledge (Table 4).

Table 3. Computerized services in the studied Libraries

SERVICES	INSTIT	UTIONS
	LAUTECH	UNIILORIN
Acquisition	No	Yes
Cataloguing	Yes	Yes
Circulation	No	Yes
Serials	No	No
References	No	No

 Table 4: Respondents (staff) IT knowledge and experience with library computerized services

Respondent	Response	Frequency/	LAUTEC	UNILORI	TOTA
s (staff) IT		%	Н	Ν	L
knowledge	Low IT	Frequency	6 60%	542%	1150%
and	knowledg	% within			
experience	e	institution			
with library	Moderate	Frequency	440%	542%	940.9%
computerize	IT	%			
d services.	Knowledg				
	e				
	High IT	Frequency		216%	29.1%
	Knowledg	%			
	e				
	TOTAL	Frequency	10	12	22
		%	100	100	100

The study analyzed the IT knowledge of the library staff as well as their experience with library automated services. The result shows that 50% had low IT knowledge, 40.9% had moderate knowledge and 9.1% had higher IT knowledge.

 Table 5: Evaluation of IT resources required for successful implementation of computerized services.

	I				
Your library	Respons	Frequency/	LAUTEC	UNILORI	TOTA
has adequate	e	%	Н	Ν	L
resources for	Strongly	Frequency	1	4	5
implementatio	agree	% within	10	33.3	22.7
n of	-	library			
computerizati	Agree	Frequency	1	4	5
on project	-	% within	10	33.3	22.7
		library			
	Disagre	Frequency	8	4	12
	e	% within	80	33.3	54.5
		library			
	Total	Frequency	10	12	22
		% within	100	100	100
		library			

Table 5 evaluates the adequacy of IT resources in the selected university libraries. The result reveals that 22.7% of the respondents strongly agreed that the selected university libraries have adequate resources required for implementation of the library computerization project, 22.7% agreed while 54.6%. This implies that the selected university libraries do not have adequate resources required for implementation of library computerization.

 Table 6: Adequacy of trained manpower to handle computerized services

	Response	Frequency/%	LAUTECH	UNILORIN	TOTAL
Your library has	Strongly	Frequency	2	1	3
adequate trained	agree	%within	20	8.3	13.6
manpower to		library			
handle	Agree	Frequency	2	5	7
computerized		%within	20	41.7	31.8
services		library			
	Disagree	Frequency	6	6	12
		%within	60	50	54.5
		library			
	Total	Frequency	10	12	22
		%within	100	100	100
		library			

Table 6 presents that 13.6 % of the respondents strongly agreed there is adequate trained manpower to handle computerized services in the selected libraries followed by 31.8 % of the respondents who agreed, those who disagreed have the highest percentage of 54.5% thus, this implies that the selected university libraries in South-western Nigeria do not have adequate trained manpower to handle library computerized services.

Tuble / Training of Start of LL up	Table	7:	Training	of	staff	on	IT	use
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I ubic	/ IIammg	of staff of f		
Respons	Frequency/	LAUTEC	UNIILORI	TOTA
e	%	Н	Ν	L
Strongly	Frequency		3	3
Agree	% within		25	13.6
-	library			
Agree	Frequency	40	34	8
	% within	40	33.3	36.4
	library			
Disagree	Frequency	6	5	11
	% within	40	41.7	50
	library			
	Respons e Strongly Agree Disagree	Respons Frequency/ e % Strongly Frequency Agree % within library Marge Agree Frequency % within library Disagree Frequency % within library	Respons Frequency/ LAUTEC e % H Strongly Frequency H Agree % within library Ibrary 40 Agree Frequency 40 % within 40 library 5 Disagree Frequency 6 % within 40 library 1	Respons Frequency/ % LAUTEC H UNIILORI N e % H N Strongly Frequency 3 Agree % within 25 library 3 Agree Frequency 40 34 % within 40 33.3 library 5 Ø % within 40 library 10

It is shown in Table 7 that the respondents who strongly agreed that library management trains the staff on IT use has the least frequency, 3 (13.6%), followed by those who agreed, 8 (36.4%). Those who disagreed received the highest frequency of 11 (50%). This reveals that much effort has not been made by the library management to train their staff on the use of IT

Table 10: Evaluation of operational environment for IT staff

Work	Respons	Frequency/	LAUTEC	UNIILORI	TOTA
station	e	%	Н	Ν	L
conduciv	Strongly	Frequency	2	3	5
e work.	Agree	% within	20	25	22.7
	-	library			
	Agree	Frequency	3	4	7
		% within	30	33.3	31.8
		library			
	Disagree	Frequency	5	5	10
	-	% within	50	41.7	45.5
		library			
	Total	Frequency	10	12	22
		% within	100	100	100
		library			

Table 10: shows that 22.7% of the respondents strongly agreed that their workstation temperature is conducive for work. 31.8% agreed while 45.5% disagreed. This implies that the workstation temperature for work at the selected libraries is fairly conducive.

Table 11: Users' access to the library computerized services

		(N=19	92).		
Regular	Respons	Frequency/	LAUTEC	UNIILORI	TOTA
access to the	e	%	Н	Ν	L
library	Yes	Frequency	6	15	21
computerize		% within	6.3	15.5	10.9
d services		library			
	No	Frequency	89	82	171
		% within	93.7	84.5	89.1
		library			
	TOTAL	Frequency	95	97	192
		% within	100	100	100
		library			

Table 11: Shows the users' access to the library automated service and the result revealed that only 10.9% of the respondent have regular access to the computerize service in their library while 89.9% do not have regular access to the services.

services.						
Users'	Respons	Frequency/	LAUTEC	UNIILORI	TOTA	
satisfaction	e	%	Н	Ν	L	
with the	Satisfied	Frequency	22	38	60	
library	F	% within	23.1	39.2	31.3	
computeriz		library				
e services	Not	Frequency	73	59	132	
	satisfied	% within	76.8	60.8	68.7	
		library				
	TOTAL	Frequency	95	97	192	
		% within	100	100	100	
		library				

 Table 12: Users' satisfaction with the library computerize

Table 12: indicates that's 31.3% of the respondent are satisfied with the computerized services offered by the selected libraries, while 68.7 are not satisfied. Thus, confirming that the computerized services in these libraries are inadequate to meet the users' satisfaction.

Table 13: Evaluation of the library computerized services

Information	Respons	Frequency/	LAUTEC	UNIILORI	TOTA
provided by	e	%	Н	Ν	L
library	Strongly	Frequency	86	75	161
computeriz	agreed	% within	90.5	77.3	83.8
ed system		library			
is relevant	Agreed	Frequency	9	22	31
to users'		% within	9.5	22.7	16.1
need		library			
	Disagree	Frequency	0	0	0
	d	% within			
		library			
	Total	Frequency	95	97	192
		% within	100	100	100
		library			

Table 13: Shows that most of the respondents (83.8 %)rated that the relevance of library computerized system is very important.

 Table 13.1: Accuracy and Reliability of library computerized services.

Information	Respons	Frequency/	LAUTEC	UNIILORI	TOTA
provided by	e	%	Н	Ν	L
computerized	Strongly	Frequency	58	52	110
system is	agreed	% within	61.2	53.6	57.3
comprehensi	-	library			
ve, accurate	Agreed	Frequency	31	28	59
and reliable.	-	% within	32.4	28.9	30.7
		library			
	Disagre	Frequency	6	17	23
	ed	% within	6.4	17.5	11.9
		library			
	Total	Frequency	95	97	192
		% within	100	100	100
		library			

Evaluation of the information provided by the library computerized system as shown in Table 13.1 revealed that most of the respondents strongly agreed that information provided by the library computerized system is comprehensive, accurate and reliable (57.7%), 30.7% of them agreed while 11.9% disagreed.

Table 14 provides a clear picture of the respondents' perception of constraints to the provision and utilization of library automated services. It is revealed that inadequate financial assistant received the highest frequency followed by inadequate IT resources, problem with the use of available software, logistic problem, lack of culture of evaluation to access performance of the computerized library project, lack of policy guidelines in that order.

Discussion

The use of information and communication technologies has not gained ground fully in some Nigeria university libraries. None of the two universities under this study has all of library services fully automated. LadokeAkintola University of Technology LAUTECH, Ogbomoso has not recorded much progress toward the effective automation of its library operations. TINLIB software being used at the library is no more functioning while virtual library project is still under construction. On the other hand, University of Ilorin automates most of it services and TINLIB software is also in use.

 Table 14 constraints to the provision and utilization of computerized services in selected university libraries.

computerized services in selected university instariles.						
constraints	Constraint	LAUTEC	Tot	UNIILORIN	TOTA	
to the		Н	al	Frequency/%	L	
provision		Frequency/				
and		%				
utilization		SA A		SA A D	100	
of		D SD		SD		
computeriz	Inadequate	22	22	100	100	
ed services	fund			-		
in selected	Inadequate	15 7 -	22	68.2/ 31.8 / /-	100	
university	IT			-		
libraries	recourses					
	Logistic	6 5 9	22	27.3/22.7/40.9/	100	
	problem	2		9.1		
	Problem of	8 7 5	22	36.4/31.8/22.7/	100	
	software	2		9.1		
	Lack of	2 8 9	22	9.1/36.4/40.9/1	100	
	policy	3		3.6		
	guidelines					
	Lack of	6 10 4	22	27.3/45.4/18.2/		
	culture of	2		9.1		
	evaluation					
	to access					
	performanc					
	e of the					
	computeriz					
	ed library					
	project					

SA= Strongly Agreed; A=Agreed; D=Disagreed; SD=Strongly Disagreed

Based on the questionnaire survey of the library staff and the interview granted by university librarian, their information technology resources at university's library were inadequate for successful implementation of the library computerization project.

However, computerized services such as CD-ROM services, internet search online journal subscription and so on proved by the libraries have a tremendous impact on the organization, management and dissemination of information. It gives library users access to vast library resources and transform the libraries into new information service unit.

This study also revealed that most of the selected library users do not have regular access to the few computerized services provided by the libraries. In a nut shell, majority of them are not satisfied with the library computerized services which is an indication of poor state of library computerization in the universities under study. Moreover, much effort has not been made by the library management to train their IT staff which hindered the successful implementation of the library computerization project of the two universities.

The library computerization project was not viable in the selected universities due to inadequate funding, logistic problem, lack of policy guideline and lack of culture of evaluation to access the performance of the computerized library in that order. **Conclusion**

This study is an effort to fill a gap in making information technology viable in Nigeria university libraries. The result from the study showed that the current ICT infrastructure in some of Nigeria university libraries cannot enable them to be part of the global information society; some of the impediment to this are; inadequate finding, logistic problem, power outages and so on.

For the survival and relevance of university libraries, in Nigeria, it is highly recommended that ICT be declared an institutional priority with adequate funding support. The university authorities, through the libraries management should engage in periodical training of the library personnel so that they could acquire sufficient knowledge and skills.

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