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Factors Affecting Information and Communication Technologies (ICTs) Use by Academic Librarians in Southwestern Nigeria

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Introduction

The term "Information and communication technologies "(ICTs) is defined as a diverse set of technological tools and resources used to communicate and create, disseminate, store, and manage information (Blurton 1999:46). ICTs encompass a range of rapidly evolving technologies and they include telecommunication technologies (telephony, cable, satellite, TV and radio, computer-mediated conferencing, video conferencing) as well as digital technologies (computers, information networks (internet, World Wide Web, intranets and extranets) and software applications (Chisenga, 2006).

The key purpose of any library is to provide a quality service: access to relevant information (Buckland, 1992), to computers, information networks and software applications. These technologies are making it possible for libraries to provide a variety of library and information services to clientele. All the functions and services that academic librarians used to provide manually can be provided now through the use of ICTs which can do things better and faster. To mention some of the opportunities presented by ICTs to the libraries according to Haliso (2007) and Chisenga (2006) are:

- Organization of information for use
- Capacity building
- Management information system
- Digital libraries
- Resource sharing/document delivery.

Academic libraries are institutions that are established to take care of the information need of students, lecturers, researchers and other community of scholars. Their mission is providing quality information service and knowledge products (print and electronic) to resident community of scholars. In the words of Wolpert (1999), "academic libraries are cost effective information service and provider of knowledge products to a resident community of scholars". In order to function and provide timely information at a faster speed to lecturers, researchers and students, it would appear that administrators of academic libraries realised the important role information and communication technologies (ICTs) play in their job performance and so made information and communication technologies (ICTs) available to their workforce.

From the global point of view, it appears that there is tacit consent that a relationship exists between use of information and communication technologies and job enhancement of librarians (Ajayi, 2001). Stephen (1995) submits that the use of information technology provides significant benefits in work measurement, cost reduction, productivity improvement and better services to customers and clients. Actually it is availability which makes use possible and it is use that makes performance attainable. So,

the combined effect of availability of information and communication technologies can enhance the job performance of the academic librarians. There is need for all developed and developing nations of the world to take information and communication technologies (ICTs) as tools that aid the enhancement of job performance of the library staff through the application of the ICTs by the librarians (Rosenberg 2005; Mphidi 2004; Chuene, 2000; Lancaster & Sandore, 1997; Siddique, 1997). This cannot be achieved unless academic libraries realise the tremendous role information and communication technologies could play to enhance effective services. Rosenberg (2005) submitted that libraries need to develop a strategic information and communication plan that would enhance the deployment of ICTs in their libraries. The ICT deployment and application is done by academic librarians who are trained to man specific sectors of the library (Tenant, 1995).

In Canada, the use of ICTs and job performance of librarians is recorded. A report prepared by the Canadian Association of Research Libraries (CARL) revealed that in the year 2000/2001, academic libraries subscribed to 436,731 electronic journals. *The same report also states that librarians are leaders in using technology to transform traditional library resources and services to meet the challenge of the 21st Century.*

In Singapore, Chia, Lee and Yeo (1998) report that a committee was set up by the government and mandated to design an information technology plan for the nation. The National Library of Singapore on its part took an initiative in ensuring all libraries especially academic libraries are ICT based. In Saudi Arabia, Siddique (1997) carried out a study on the use of ICT in academic libraries and the finding reveals that out of the six universities surveyed majority of the libraries had Internet, one kind of library software or the other, CD-ROM facility, OPAC services, FAX and E-mail services. It is eight years since Siddique carried out this study and if the same study were to be carried out today; the findings would be totally different.

Academic libraries in Africa do not enjoy the same information delivery methods like those in developed countries except those in Southern Africa. Chisenga and Rorissa (2001) point out the great disparity in the adoption and use of ICTs in academic libraries. Waiganjo (2006) writing from Kenya states that academic libraries in Kenya suffer poor funding, poor communication system and lack of ICT qualified librarians. The case is not different in Uganda. Magara (2002) pointed out that power unreliability, management attitude and poor ICT skill of the librarians; Adeya (2007, 2002) writing from Botswana states that inadequate computerization, inadequate infrastructure and inadequate human capacity as the major challenges towards ICT use. Rosenberg (2005) alludes the challenges to ICT use to lack of library software standardization

In Ghana, academic libraries enjoyed the availability and use of information and communication technology through the DANIDA sponsored project under the auspices of the International Federation of Library Association-Africa branch. The six universities were networked under this project and this made communication very easy and document delivery possible among the academic librarians in the six university libraries. However, the researcher made a visit between Feb 26, 2005 and March 7 to the University of Ghana in Legon to find out the progress of the DANIDA project but sad to report that the project could no more continue due to lack of funds.

Academic libraries in Nigeria attempted to automate library functions as far back as 1970; 1990 and the attempt still continues. TINLIB software was introduced in leading academic libraries including those of the University of Ibadan and Ahmadu Bello University Library (Omoniwa, 2001) but due to some technical and organisational problems, no single academic library in Nigeria in general and in the Southwestern Nigeria in particular uses the TINLIB software today. Obajemu and Ibegwam (2006) point out that libraries in Nigeria are still on the race to make their services totally ICT- based. The MacArthur report of 2005 titled "Developing Strong University Libraries in Nigeria," points out the need to develop effective information delivery system as a key component of university teaching and learning, and modern technology greatly enhances such system. The report also points out lack of appropriate funding system to acquire relevant information and communication tools; lack of infrastructure to provide access to electronic information. Money was not there for collection development and there have been few acquisitions, most of the collections stopped growing substantially in the mid-70s.

Information and Communication Technologies (ICTs) enhance service provision to library clientele. Librarians use ICTs to perform functions like cataloguing and classification, serials management, collection management, budgeting, circulation management, referencing, indexing and abstracting in order to improve information services to library users. However, it has been observed that most

academic librarians in Nigeria still struggle with manual library operation method. Consequently, library users show dissatisfaction and complain of poor information services delivery by the academic librarians.

Objectives of the Study

The general objective of this research work was to investigate the level of availability and use of information and communication technologies in academic libraries in Southwestern Nigeria, and the relationship of this to job performance in the selected academic libraries.

The specific objectives of the work were to:

1. Determine the types of library services that are automated in the Southwestern Nigeria.
2. Find out the internet connectivity of academic libraries in the Southwestern Nigeria.
3. Determine the size of bandwidth connectivity for academic libraries in the Southwestern Nigeria.
4. Evaluate ICT strategies and training policies of the academic libraries in the Southwestern Nigeria

Research Questions

In order to achieve the objectives stated above, attempts were made to find answers to the following questions:

1. What are the types of library services that are automated in academic libraries in the southwestern Nigeria?
2. How are the academic libraries connected to the internet in southwestern Nigeria?
3. What is the bandwidth connectivity for academic libraries in southwestern Nigeria?
4. Where do academic libraries in southwestern Nigeria get ICT support?
5. Do academic libraries in southwestern Nigeria have ICT strategies and training policies?
6. What factors affect ICTs use in the southwestern Nigeria?

Literature Review

There is an overwhelming awareness that there are great potentials in the availability and use of information and communication technologies. The use of ICT promotes development and improves services in any organisation. It brings changes in today's business environment. In academic environment, it speeds up information delivery, facilitates teaching, learning and research. In spite of the above observation about the potentials, and benefits of using ICT, the level of awareness and use in Nigeria appears to be very minimal. Organisational, environmental and cultural factors stand against the good and perceived will of the use of ICTs. Omolayole (2002) points out three strong reasons that stand against the effective use of ICTs in Nigerian academic libraries. Each of the factors she has mentioned has a resultant effect on availability and use of ICT. The factors are: low level of computer culture: poor telecommunications infrastructure; and general lack of awareness. Another constraint that affects the use of ICTs in Nigerian academic libraries is low level of computer culture. When librarians are not computer literate, utilizing the facility would be a problem. In other words, having a good background in computer skill makes the use of computers in work places very practicable. Lack of awareness on the other hand makes availability impossible. Library managers must be aware of the advantages of using ICTs in libraries and information sector. Training workers on the use of computers and other related technologies for services in any organisation including academic libraries is very important. A well trained worker can perform effectively and efficiently in his/her work place than he/she who is not trained at all.

Youngman (1999) carried out a study on library staffing considerations in the age of technology in Kansas State University. The study found out that human resource is essential to the success of any

technology-based service. It means that any library or organisation that ignores the human factor is likely to appreciate ignorance which may lead to underuse. Experienced librarians can be a significant resource in managing libraries with technology.

Chisenga (2004) surveyed the use of ICTs in public libraries in ten (10) Anglophone African countries. The study revealed that all libraries studied pointed out lack/inadequate ICT personnel and lack of fund. The most interesting aspect of the findings is that libraries in South Africa express lack of burglaries to protect computers from being stolen whereas findings from two Nigerian libraries reveal erratic power supply as one of the barriers for ICT use. Out of the ten countries studied, only Nigeria has a very unique problem (power supply).

Okiy (2005) points out poor and inadequate telecommunication facilities; poor level of computer literacy, even within the academic community; poor level of computer facilities; poor level of awareness of Internet facilities among policy makers, government officials and the ruling class in general; and minimum involvement of academic institutions in network building in Africa as challenges militating against the use of ICTs.

Low level of ICT skills; lack of functional ICT policy; economic barriers (funds); ICT infrastructure; resistance to change; low capacity of communication facility; absence of digital or electronic libraries except in South Africa; lack of policy for manpower development etc. are common barriers mentioned as factors undermining the use of ICTs.

Gardner (1994) points out human resources, vendor and maintenance, culture, funding, education and training as key factors for ICT use in developing countries. According to him, unskilled and untrained human resources lead to the employment of expatriates and African governments cannot pay or sustain expatriates. Vendor's main concern is also making money without maintenance plan. Without adequate training, organisations may not be able to effectively use them.

Other factors that contribute to the under-use of ICTs is culture. System designers need to understand or undertake a systematic study of the organisation and country within which the system will be used (implemented). Supporting this Odedra (1992) opines that culture is a strong factor that dictates if technology be accepted or not accepted. The challenge goes to system planners and programme writers to consider the local way of thinking, cultural setting, level of education and awareness.

Culture may have different levels of analysis. Schneider and Barsoux (1997) analysed culture as functional, professional, organisational, industrial, regional and national. To this study however, professional and national cultures appear to be more suitable.

Professional culture has cultural peculiarities, the way they (people) take training, supervision and socialization. National culture is about where someone is born, undergoes training etc. Tully (2003) states that the environment where one grows up can determine his or her ability to fully use modern technologies. German Youth Institute conducted an empirical research from 1998 to 2001. Quantitative survey of 4,500 young people between ages 15 and 26 was used. The findings reveal that young people are interested in the name 'technology' and make absolute use of the technology without any hindrance. The same study also reveals that these young people started using computers right from their childhood and this has a positive influence towards their level of performance. However, the same can not be said in Africa especially when it comes to the older generation who schooled and obtained their academic qualifications without sighting a PC. Some of these do occupy key positions in administration and find it very difficult to think even an innovative way of doing things.

As other scholars have stated above on the challenges faced by academic libraries in the process of making ICTs available and used, the report submitted by the Mortenson Center for International Library Programs at Illinois, Urbana-Champaign (2005) pointed out that lack of government funding; limited and expensive Internet bandwidth; unstable power sources; and insufficient staff development affected job performance of academic librarians.

Methodology

The study made use of descriptive research design. A total enumeration technique was used to cover a population of one hundred and ninety-five (195) academic librarians working within the study area. The group constitutes all academic librarians with the minimum academic qualification of Master's degree in Librarianship, Archival Studies, Information Science and other related degrees. Questionnaire

was distributed by hand to one hundred and ninety five (195) academic librarians but only one hundred and fifty three (153) academic librarians filled the questionnaire and returned making the retrieval (response) rate 78.6 percent. Table 3.1 below shows distribution of data by institutions.

Table 1. Distribution of copies of the questionnaire by the Institution Libraries

S/N	Name of Library	Number distributed	No. returned	%
1	University of Ibadan Library	23	19	82
2	Obafemi Awolowo University lib.	19	10	52
3	University of Lagos	15	13	86
4	Bowen University	3	2	66
5	Federal University of Technology Library, Akure	8	7	87
6	Olabisi Onabanjo University Library,	24	19	79
7	Covenant University library	8	8	100
8	Babcock University Library	5	5	100
9	Ladoke Akintola University of Technology Library,	8	7	87
10	University of Agriculture, Abeokuta	8	4	50
11	Lagos State University	13	10	76
12	Pan African University Library	2	2	100
13	Adekunle Ajasin University ,Akungba	4	3	75
14	Ibadan Polytechnic	7	6	85.7
15	Federal Polytechnic , Ilaro	5	4	80
16	Mashood Abiola Polytechnic Lib.	1	1	100
17	Lagos State Polytechnic , Ikorodu	2	2	100
18	Yaba College of Technology	13	10	76

19	Federal Polytechnic, Ede	3	2	66
20	Fed. College of Edu., Osiele	7	5	71
21	Fed.Coll.of.Edu(Special) Oyo	5	4	80
22	Osun State College of Edu, Ila	3	3	100
23	Osun State College of Edu., Ilesha	3	2	66.6
24	Adeniran Ogunsanya College of Edu.,	4	3	75
25	Fed. College of Edu(Tech) ,Yaba	2	2	100
	Total	195	153	

Table1 above shows a total of one hundred and ninety-five (195) copies of questionnaire were distributed to librarians working in libraries that are either fully or partially ICT based.

Gender Distribution

Here respondents were asked of their sex and close observation shows that there is a significant variation in the distribution by sex of the academic librarians as shown on Table below.

Table 2. Gender Distribution

Gender	Frequency	Percentage
Male	119	77.8
Female	34	22.2
Total	153	100.0

Of the one hundred and fifty three (153) respondents, 119(77.2%) were male librarians while 34(22.2%) were female librarians. This means that there are more male academic librarians than the female ones in the studied academic libraries.

Findings and Discussion

Research Question 1.What are the types of library services that are automated in academic libraries in the Southwestern Nigeria?

Table 3 .Automation Profile of Academic Libraries in the Southwestern Nigeria

Services Automated	No. of libraries	Percent
Acquisition and budgets	13	52
Cataloguing and classification	17	68
Circulation control	14	56
Serial administration	12	48
Inter-library loan	4	16
Others	1	4

Table 3 and Fig.1 show the library services that are automated in the study. Out of the twenty five (25) academic libraries, only twenty two (88 percent) libraries were found to have started automating their services. Seventeen (68 percent) of them indicated that they have automated their cataloguing and classification activities. This is followed by fourteen (56 percent) libraries that have automated circulation control services. Thirteen (52 percent) libraries have automated acquisition and budget services while, twelve (48 percent) libraries automated their serials. Only four (16 percent) libraries automated inter-library loans.

Fig.1. Automation profile of academic libraries

This finding is supported by Chuene (2000); Chisenga (2004); (Sani & Tiamiyu (2005). Chuene (2000) carried out a study between automated library services and manual library services. The finding revealed that automated acquisition system reduced the manual labour from twenty-seven to fourteen. The author also found out the automated library system to be the best in terms of providing fast, error free service and at the same time increased efficiency. Sani and Tiamiyu (2005) reported on evaluation of automated services in Nigerian Universities. The study included 25 universities (Federal, State & Private) and the finding revealed that 55 percent of Federal University libraries; 19 percent of State University libraries and 12 percent of Private University libraries indicated the availability of different types of automated services. Siddiqui (1997) studied Information Technology use in academic libraries in Saudi Arabia. The report of the finding revealed that out of the six universities, four university libraries had automated all their services. Chisenga (2004) reported ICT use in ten Anglophone African public libraries. Out of the twenty-five public libraries he studied, thirteen (13) libraries automated their cataloguing and classification services; five (5) libraries automated their acquisition services; six (6) libraries automated circulation services; four (4) libraries automated serial services; four (4) libraries automated interlibrary loan services and ten (10) libraries automated their OPACs. Okiy (2004) reiterated that the computer based cataloguing system is the best system that offers librarians a conducive environment to function properly.

Research Question 2: How are the academic libraries connected to the internet in southwestern Nigeria?

Table 4 : Type of Internet Connection of the Responding Libraries

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Type of connection	Connected		Not connected		Total	
	No.	%	No.	%	No.	%
WIRELESS	8	32	17	68	25	100
LAN/WAN	9	36	16	64	25	100

Table 4 indicate how academic libraries were connected to the Internet. 9(36.0 percent) libraries were connected to the internet using LAN/WAN. 8(32 percent) libraries stated that they were connected to the net using WIRELESS connection. The finding also indicated that 11(37.9 percent) libraries were without any type of connection.

Research Question 3. What is the bandwidth connectivity for academic libraries in Southwestern Nigeria?

Table 5: Bandwidth Connectivity of the Academic Libraries Studied

S/N	Size Of Bandwidth	Number of Libraries connected	%
1	Dial-up to 50kb	1	3.4
2	64kb	1	3.4
3	128kb	2	6.9
4	256kb	4	13.8
5	516kb	2	6.9

Table 5 indicates the availability of bandwidth for Internet services and the size of bandwidth in academic libraries in the Southwestern Nigeria. Four (13.8%) libraries responded that they had 256kb each while two (6.9%) libraries responded that they had 516kb and 128kbs respectively. One library has a dial-up to 50kb and another library another has 64kb respectively. The implication of this finding was that majority of the academic libraries nineteen (65.5%) did not have a separate bandwidth connection to provide Internet services to their clientele. This is not unconnected with the funding problems academic libraries face today. The study also sought to find out how the automation exercise of the academic libraries including the Internet services was financed. The response from interviewing twenty-five head librarians was that fund had been a big problem for libraries to sufficiently provide quality ICT based information services to the users. On the interview question that sought answer on who supported their ICT projects, all the twenty five library administrators described their individual library financial support as follows, twenty-three(93%) of them responded that they got financial aid from the Government while the two private institutions namely Adekunle Alalade Library of Babcock University and Learning Resource Centre of the Covenant University indicated that the University administration provided finances for their ICT projects. The implication of this finding was that more than half of the libraries studied did not account for any bandwidth connection. Moreover, from the interview interaction with the systems librarians it was revealed that no single academic

library had its own bandwidth but have access through the university bandwidth. Owning a dedicated bandwidth would enhance effective job performance of the academic librarians giving them the liberty to use any time they want. It would also grant them direct access to other databases, where document delivery may be made easier. Supporting this finding are Rosenberg (2005) and Chisenga (2004). In their individual findings both Rosenberg and Chisenga reported that the size of bandwidth could depend on the financial strength of libraries.

Research Question 4. Where Do academic Libraries in the southwestern Nigeria get ICT support?

Table 6: ICT Support and Staff Skill

S/N	ICT Support	No. of Libraries	Percentage
1	Has-in-house library support	18	72.0
2	Receives ICT support from parent organization's ICT staff	12	48.0
3	Pays and receives for external ICT support	9	36.0
4	Non-ICT specialized librarians deal with network access problems	12	48.0
5	Hardware problem	9	36.0
6	Software problems	8	32.0
7	Printing problems	12	48.0
8	Training and support of staff	8	32.0

Table 6 and Fig. 2 show ICT support and staff skill in academic libraries in Southwestern Nigeria. The result revealed the following: 18(72 percent) libraries indicated that they had in-house ICT staff, while 7(28 percent) libraries responded they did not. Twelve (forty-eight percent) libraries stated they used ICT staff from parent organization while, 13(52 percent) libraries did not use ICT staff from parent organization. 9(36 percent) libraries sought for external ICT support while 16 (64 percent) libraries did not seek for external ICT support.

The table also indicate the services offered by non-ICT support staff. Twelve (48 percent) libraries indicated that the non-ICT specialized library staff offered help on network access related problems. Nine (36 percent) libraries indicated that hardware problems were being solved by non-ICT specialized library staff, while 8 (32 percent) libraries stated that non-ICT specialized library staff provided solution to software related problems. Twelve (48 percent) libraries stated that non-ICT specialized library staff provided solution to printing related problems.

Fig.2. ICT support and staff skill

Research Question 5: Do academic libraries in the Southwestern Nigeria have ICT strategies and training policy?

Twenty-five University head librarians were interviewed and out of the twenty-five (25) academic libraries surveyed the finding reveals that only ten(40 percent) of academic libraries indicated having information and communication technologies strategy while fifteen (15) or 60 percent of the academic libraries stated that they do not have ICT strategy.

Training the academic librarians to appropriate skills and fully use information and communication technologies is very vital. Training can come in many forms but the most important and cost effective one is training on-the-job. Unless library management has sufficient fund to send their ICT staff to the most advanced countries, it is always advisable to have in-house training policy. Out of the twenty-five academic libraries, sixteen libraries indicated that they have ICT training policy. ICT strategy means an official written plan containing objective and guidelines for acquisition and usage of ICT by the library. ICT is a project that gulps a huge amount of money and without having a guided plan and well defined objective/s making ICTs available is as good as building a house without a foundation.

Research Question 6. What are the organizational, human and cultural factors that affect the availability and use of ICTs in academic libraries in Southwestern Nigeria?

Only systems librarians (thirteen from universities, six from polytechnics, and six from colleges of education) filled out the questionnaire on the factors affecting availability and use of ICTs in academic libraries in Southwestern Nigeria. Twenty-five copies of the questionnaire were distributed to systems librarians who worked directly with the ICT facilities. The finding is presented in Table 15 below.

Table 7: The Cultural, Human and Organizational Factors Affecting the Availability and Use of ICTs in Academic Libraries in Southwestern Nigeria

S/N	Factor	Effect of the Factor	Yes %	No %
1	Cultural	academic librarians reluctance to use ICT	16 76	5 24
		difficulty in training the academic librarians	17 80	4 20
2	Human	lack of ICT qualified staff	18 85	3 15
		skill level of academic librarians	18 85	3 15
3	Organizational	inadequate existing ICT resources	17 80	4 20
		lack of commitment by institutional mgt	19 90	2 10
		lack of updated ICT strategy	19 90	2 10
		lack of adequate budget	17 80	4 20
		erratic power supply	17 80	4 20

Table 7 shows factors that affected the availability and use of ICTs in academic libraries in Southwestern Nigeria. Moreover, the table points out the key factors and

their effects on availability, use, and job performance. Twenty-one (21) system librarians took part in filling out the questionnaire. Three key factors namely cultural, human and organizational were identified. The effect of each factor is shown in the table above. Lack of institutional commitment and lack of updated ICT strategy ranked top as factors affecting ICT availability and use of ICT. In other words, 19(95 respondents) reported that lack of institutional commitment and lack of updated ICT strategy are factors that militated against the availability and use of ICTs. Eighteen (eighty-five percent) stated human factor, that is lack of ICT qualified staff militated against the use of ICTs towards job performance. Seventeen (eighty percent) indicated organizational factors like lack of adequate budget and erratic power supply. Lack of budget as an organizational factor, causes inadequate availability of ICTs while, erratic power supply being organizational factor, results in underuse of ICTs. Sixteen (76 percent) of the respondents identified academic librarians reluctance to use ICTs as a cultural factor towards effective job performance.

This finding is not different from the finding of Hann (1995) who stated that organizational, cultural and human factors are key factors that can affect the use of ICTs. Another scholar who supported this finding is Chisenga (2004) when he carried out ICT use in ten (10) Anglophone African public libraries. This finding reported that cultural, organizational, lack of fund, lack of qualified ICT personnel, erratic power supply led to the non-availability and under-use of ICT facilities. Other studies like Oketunji, Daniel, Okojie and Abdulsalaam (2002), support the finding. In the words of Oketunji, Daniel, Okojie and Abdulsalaam, the following hindrances were discovered when they carried out a study on forty years of Information and Communication Technology (ICT) of Library Services in Nigeria. The study covered 50 libraries in Nigeria. The finding indicated the following problems as hindrance towards ICT use: occasional breakdown; NEPA; obsolete equipment; lack of maintenance; lack of technical support; lack of adequate training. The study by Okiy (2005) showed that lack of fund, and lack of management support led to non-availability of ICTs in Nigerian university libraries.

Research question 7 was complimented by a structured interview guide. Twenty-five (25) library administrators participated in this section. Almost all of them reported that they faced challenges in the cause of making ICT available, utilised and even with their workers as well. Only Three (twelve percent) of the respondents stated that they had less challenges. These are library administrators in private academic libraries. Twenty-two (eighty-eight percent) respondents expressed enormous challenges. Some of the challenges are: irregular power supply, lack of adequate fund and academic librarians' attitude towards the use of information and communication technologies (ICTs) at work places. Twenty-two (eighty-eight percent) of the respondents stated that irregular power supply militated against the use of ICTs and lack of a stand-by generator to use during the absence of NEPA. All respondents (100 percent) stated the librarians' attitude towards the use of ICT as not encouraging. Twenty-two (eighty-eight percent) of the academic library administrators said that lack of adequate fund allocation is a cause for the poor use of ICTs .

This finding is supported by the findings of the following scholars: Obajemu (2006), okiy (2005), Sani and Tiamiyu (2005), and Jegede (2001). Obajemu asserted that librarians' attitude to the use of ICTs can affect the way they are used. Attitude is a state at which librarians either accept or reject the ICTs. While accepting the ICTs may improve the librarians' job performance, not accepting may result in poor performance. It is in the light of this Obajemu stressed the need for positive attitude. Okiy pointed out that poor and inadequate telecommunication facilities; poor level of computer literacy militated the use of information and communication technology in Nigeria. Jegede advised that professional librarians in Nigeria need to acquire necessary skills that will enable them to be competent in an ICT environment, while Sani and Tiamiyu pointed out that irregular power supply; librarians attitude towards the use of ICT and poor funding among others stood as militating factors towards ICT availability and use in Nigerian academic libraries.

Conclusions and Recommendations

This study investigated factors responsible for the poor use of information and communication technologies in the southwestern Nigeria. Literature was reviewed extensively. From the finding it is evident that lack of commitment by institutional management; lack of ICT strategy; lack of qualified staff to manage the ICTs and low skill level of the academic librarians dominated the reasons for the poor use of the ICTs in academic libraries in the Southwestern Nigeria. Other factors that contributed to the underuse of the ICTs are: lack of adequate budget and erratic power supply.

The following recommendations are derived from the findings of the study:

1. The academic library management in Southwestern Nigeria should provide adequate fund for the acquisition of appropriate ICTs.
2. Management of libraries must ensure that adequate training in the use of ICTs is given to academic librarians
3. The Management of academic libraries in the Southwestern Nigeria must put ICT strategy in place.
4. There should be a standby generator to ensure the continuity of work in the case of power outage.

References

- Blurton, C. 1999. Chapter 2: New directions in education. In: UNESCO's World communication and information 1999-2000. Paris:UNESCO: 46-61
- Chia, L.T, Lee, B.S., & Yeo, C.K. 1998. Information Technology and the Internet: The Singapore experience. *Information Technology for Development* 8(2/1998):101-120
- Chisenga, J. 2006. Information and communication Technologies: Opportunities and Challenges For National and University Libraries in Eastern, Central and Southern Africa. **Keynote paper presented at the standing conference of African National and University libraries of Eastern, Central and Southern Africa (SCANUL-ECS), The courtyard Hotel, Dar es Salaam, Tanzania, 9-10 July 2006**
- Chisenga, J. .2004. **The Use of ICTs in African Public Libraries: A Survey of Ten Countries in Anglophone Africa**. Oxford: International network for the availability of Scientific Publications (INASP).
- Chisenga, J & Rorissa, A. 2001. Libraries and ICT:a review of global trends and the state of the art in Africa. Paper prepared for the second meeting of the (CODI), Addis Ababa, Ethiopia, 4-7 September.
- Chuene, M..M. 2002.The effect of Information Technology on Library Acquisition: Experiences at the University of North, South Africa. **African journal of Library, archives and Information Science** 11.1:25-38.
- Gardner, B. 1994. **Ensuring Successful Information Technology Utilisation in Developing Countries**. Garborone: Botswana (Pty) Limited, Botswana, 12-20.
- Haliso, Y. 2007. Internet availability and use in academic libraries in south west Nigeria. *Babcock Journal of Management and Social Science*, Vol.5 No.2.January 2007 Special Edition.pp:246-261.
- Mphidi, H. 2004.Digital Divide or Digital Exclusion? The Role of Libraries in Bridging the Digital Divide. Conference imparted LIASA Seventh Annual Conference. Pretoria: LIASA.Retrieved January 11th 2007 from:

http://www.liasa.org.za/conference/conference2004/papers/LISA_conferene_2004_Mp

Obajemu, A.S. and Ibegwam, A. 2006. A Survey of Librarians' Attitudes to Training Programmes on ICT application to Cataloguing and Classification Workshops in Nigeria. ***African Journal of Library, Archives and Information Science*** 6.1:19-271.

Odedra, M.1992. Enforcement of Foreign Technology on Africa: Its Effect on Society and the Use of Information Technology. African Technology Forum, August/September, 18-22.

Okiy, R.B. 2005. Strengthening Information Provision in Nigerian university Libraries through Information communication technologies. *The Electronic Library* 23.3: 311-318.

Omolayole, O. O. 2002. Electronic Services in Nigerian Libraries. A Key Note Address presented at the Ogun State Chapter of the Nigerian Library Association.

Omoniwa, M. A.2001.The Computerization of the Kashim Ibrahim Library of Ahmadu Bello University, Zaria 1972-2001. ***Nigerian Libraries*** 35.1:15-22.

Rosenberg, D. 1998. Information Technology and University Libraries in Africa, Internet Research. ***Electronic Networking Application and Policy*** 89.1:5-13.

Rosenberg, D.2005.Towards the Digital Library: Findings of an Investigation to Establish the Current Status of University Libraries in Africa. Oxford: International Network for the Availability of Scientific Publications.[online].Available [www:http://www.inasp.info/pubs/INASPdigitallib.pdf](http://www.inasp.info/pubs/INASPdigitallib.pdf) (Accessed March 31,2006)

Sani, A. and Tiamiyu, M. 2005.Evaluation of Automated Services in Nigerian Universities. ***The Electronic Library***.23.3:274-288.

Siddiqui, M. A. 1997. The Use of Information Technology in Academic Libraries in Saudi Arabia. ***Journal of Librarianship and information Science***. 29.4:195 – 204.

Stephen, R.B.1995. ***Information and Records Management: Document Based Information System:4th edition*** Glencoe New York: McGraw Hill.

Tully, C.J. 2003. Growing Up in Technological Worlds: How Modern Technoloactogies Shape the Everyday Lives of Young People. ***Bulletin of Science, Technology and Society***. 23.6 : 444-456.

Wolpert, A.1999.Services to Remote Users: Marketing the Library's Role. *Library Trends* 47.1:34.

Youngman, D. 1999. ***Library Staffing Considerations in the Age of Technology***. Basic Elements for Managing Change.

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