Information and Communication Technologies Use in Niger Delta University Libraries: Problems and Prospects

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Abstract:- **This research work focused on Information and Communication Technologies (ICTs) use in the Niger Delta University libraries, with aims of ascertaining their problems and prospects for improvement. Two research questions guided the study. It sought to as certain the problems of ICT use in NDU libraries and to examine the prospects of ICT use in NDU libraries. Descriptive survey design was employed for the study and the entire population was the university community while the sample size was one hundred and fifty (150) registered library users. The instrument for data collection was questionnaire. Out of 150 copies of the questionnaire distributed to the respondents 140 copies were properly filled and returned representing 93.33%. To analyse the data the following descriptive statistical measures were employed: frequency table, simple percentage and mean ($\overline{X}$). The findings revealed that there are factors militating against the effective use of ICTs by the library users, ranging from inadequate funds, poor or erratic power supply, inadequate number of effective Internet Service Providers (ISP) to lack of policy framework on ICTs in the country. Also, strategies as prospects include; proper ICT seminars/workshops in the universities, provision of sufficient ICT facilities, government support on provision of stable power supply, reduction of telecommunication/computer importation tariffs, provision of adequate and effective internet services provider (ISP), establishment of National Research Centre for ICT, while others were provision of grants and aids by government and university and staff training and orientation. Based on the findings, it was recommended that efforts should be made to place a high premium/priority on application of ICTs in the services of university libraries.**

Keywords: **ICT, University library, library users, ICT use problems, ICT use prospects, Niger Delta**

I. INTRODUCTION

The importance of Information and Communication Technology to people generally and library users in particular cannot be overlooked in this 21st Century. It has become very essential to implement the use of ICT facilities in any active sector, as these facilities paves easy and speedy way to achieving goals and objectives in library services delivery.

Many Nigerian University libraries are not computerized, and are not Internet enabled, and where some ICT facilities exist they are, "guarded like an egg," Nweke, (2006). Faboyinde (2006) lamented this defect and stated that the application of ICTs in Nigerian Tertiary Institutions show that there is some consciousness of the significant role ICT can play in delivering library services, even though ICT is not fully embraced by most academic libraries in the country. The factors responsible for this development in the libraries vary - both in identity and strength.

According to Bartlet (2002), Information and Communications Technology (ICT) refers to systems for producing, storing, sending and retrieving digital files. These files can contain texts, sounds, and images both still and moving. Accordingly, Uhegbu and Igwe (2006) saw ICT as a group of technologies that are used to handle and manage information and records as in transmitting information and the use of all forms of computer and communications network.

The use of ICTs in Nigeria and African countries generally is on the increase and is continually growing. However, there is a great deal of knowledge about how ICTs are being used in developed countries, while in developing countries there is not much information on how ICTs are being introduced to schools (Etebu, 2010). Looking at the developing countries, there is generally limited access time per day usage of ICT by both the teachers and students, and even less time spent with reliable Internet access. It should be noted that, the availability and access of Information Technologies in terms of ratio of teachers and students varies greatly.

The modern emerging technologies challenge the traditional way of teaching and learning, and the process in which education is managed conventionally. Information communication technology is an important area of study in its own right, as it provides instant access to vast array of data, challenging assimilation and assessment skills (Nwachukwu, 2005). Increased access to ICT in the home, at work, and in educational institution, could mean that learning becomes a truly lifelong activity; an activity in which the pace of technological change forces in constant evaluation of the teaching and learning processes.

At first, the word Information Technology (IT) was used to mean ICT, the word was only synonymous with computer but as time passed by, it now covers other equipment created to enhance acquisition, storage and dissemination of information materials. Some of these ICT equipment were initially confined to the vicinity of the offices. But in the course of time Libraries embraced the use of this equipment to carry out their day-to-day activities as usage was adapted to carry out some routine activities. Like most tertiary institution students in developed countries, the library is

where they can access and use ICT facilities for developing and accessing on-line and off-line resources (Faboyinde, 2006).

In tertiary institutions in developed countries, student's knowledge and use of the Internet is partof their daily routine, because they have grown up with computers. It is integrated into their daily communication habits and has become a technology as ordinary as the telephone or television. These students have built up themselves towards the use of ICTs especially the Internet in their educational pursuit from oneeducational level to the other in their course of schooling (Nwachukwu, 2005).

In Nigeria, many university libraries now have ICT facilities. Some of these libraries have computers, Internet facilities, CD-ROM and software packages like Alice for windows/ISIS. TINLIB etc. However, it is disheartening to note that most of the computers are not working. The internet facilities are not maintained (Obuh, 2009). These facilities break down as soon as they are installed and there are no qualified personnel to repair them. Where qualified personnel are available, there is no money to repair the equipment. Moreover, there is incessant power failure which in some cases causes damage to ICT equipment. The students and staff do not possess ICT skills. These unpleasant situations have resulted in non-use of ICT facilities effectively by some students.

It is one thing to recognize the importance of ICTs in academic libraries, another thing is to provide the required and relevant ICT facilities and know if they are effectively being used by students. If ICTs are put to effective use, the essence of acquiring them is to a large extent justified. Consequent on the forgoing, this research studies Information and Communications Technology use in Niger Delta University libraries: Problems and Prospects.

Background of Niger Delta Unversity

Prior to the creation of Bayelsa State, there were no existing tertiary institutions in the area, not even a post-secondary education outfit or skills acquisition or training institute of any sort. This glaring deficiency, led to the establishment of the Niger Delta University (NDU) in Amassoma community on Wilberforce Island, Bayelsa State, by Chief DSP Alamieyeseigha, then governor of Bayelsa State. -

Today, the Niger Delta University has a student population of about 22,000, 2,800 staff, 2,325 registered library users (2019/2020 academic session), a main library with an e-library section in the main campus, old site, Faculty of Law library in Yenagoa, College of Health Sciences library in Amassoma, the University Teaching Hospital library in Okolobiri, Faculty of Education library, Faculty of Engineering library, both in the old site, Faculty of Science library, Faculty of Social Science library, Faculty of Management Sciences library, Faculty of Arts library, Faculty of Agriculture library, all at the newsite and the Niger Delta Study Centre Library. Suffice it to mention that the N.D.U. libraries are not computerized or automated or networked.

Objective of the Study

The main objective of this study is to examine ICT use in NDU libraries: problems and prospects. The specific objectives of the study are:

1. To ascertain the challenges in the use of ICT in NDU libraries
2. To examine the prospects of ICT use in NDU libraries

Research Questions

The study was guided with the following research questions.

1. What are the challenges of ICT use in NDU libraries?
2. What are the prospects of ICT use in NDU libraries?

Research Method

The design adopted for this study is a descriptive survey. The area of the study was the Niger Delta University, Bayelsa States of Nigeria. The population of the study was the entire University community from which one hundred and fifty (150) registered library users were purposively selected as sample. The instruments for data collection was a self-developed questionnaire titled Information and Communication Technologies (ICTs) use in Niger Delta University Libraries Questionnaire (ICTUNDULQ). Copies of the questionnaires were distributed and retrieved by research assistants in the Niger Delta University libraries. Using the four-point Likert type scale, a midpoint mean (criterion Mean) of 2.5 was established and accepted as a positive response point. This point was chosen because the average of the individual mean score is $\dfrac{4+3=2+1}{4}$ =

2.5

II. LITERATURE REVIEW

Information is power, and its strength in sustainable development cannot be overemphasized. But its adoption and utilization is bedevilled with some problems as noted by some scholars. Krubu and Osawaru (2011) reveals some factors hindering the impact of ICT in Nigerian university libraries as lack of search skills, epileptic power supply, expensive software and hardware, and huge amount of money spent to fuel generators. Oketunji (2004) affirms that the Internet and other ICTs provide a golden opportunity for the provision of value-added services by libraries. Indexing, abstracting and publication of local research and their digitization are means of facilitating learning. Aina (2004) identified the negative laissez-faire attitude of lecturers, students, and libraries as other factors militating against the development and use of ICT in university libraries in Nigeria. Furthermore, Aina admits the high cost of ICT training but opined that library staff and users should do something on their own to improve their IT skills.

Similarly, Liverpool (2001) lent credence to the above when he stated that the problems of ICT adoption and utilization

amongst Nigerian Universities are many and diverse. First of all, these institutions lack the funds to embark on full-scale computerization. They also lack regular power supply, functional telephone lines and other infrastructural facilities needed to support the efficient and effective introduction and development of the technology. Most institutions of higher learning in Nigeria lack the human capacity or effective utilization of software and for maintenance. Programmers, engineers and technicians are equally difficult to find and when they are found, the university cannot afford to retain them, as they are quickly diverted to the private sector. This lack of human capacity breeds a whole set of other problems. Academic and administrative staff can only pass on skills and ideas to their students and colleagues if they themselves are masters of their trade. This is not the case in Nigeria. Most academic and administrative staff have minimal or no ICT skills and hardly use existing opportunities to develop them even with significant encouragement

Lawal–Solarin (2013) pointed out that unreliable telecommunication networks, insecurity in the library and epileptic power supply are the determinate factors in the provision of ICT in library, that the hopeless state of library funding in Nigeria has left the cankerworm being christened financial squeeze, this is to tell us what mess the Nigerian library system has been thrown into with this situation, these librarians do not meet up with their naturally assigned traditional roles not to talk of applying the ever sophisticated information technology system. Etebu (2010) stated that, the epileptic power supply is so common to developing countries and can cause serious damage to the computer hardware and crashing of huge database. Okore (2005) in his own report stated that many librarians in this country lack internet web navigational skills. This is compounded with the fact that the internet could be disorientating due to information overload and deficiency of categorization. To Jamaal et al (2017) lack of competent staff is one of the most important factors for successful implementation of information technology is the level of competence of the staff, and most of the library personnel do not have adequate level of knowledge and competence of ICT application in libraries.

Odeh (2011) cited Ezugwu (2006) which made recommendations to challenges of ICT use that there should be orientation and workshops organized for some few days to enable some older lecturers share ideas with newly recruited members. Mezieobi (2006) in support of this stated that: Seminars, conferences, workshops and in service training are to be invigorated as to extend teachers knowledge based and information of ICT education programme. That there should be total retraining of every academic staff in Information and Communication Technology. Jameel et al (2017) concluded that most of the studies pay attention to how to adopt ICT rather than use it and ICT applications become a major interest of researchers because of the benefits that can be gotten from these applications.

III. PRESENTATION OF DATA

Research Question 1: What are the challenges of ICT use in NDU libraries?

Table 1: Challenges of ICT use in NDU libraries

S/N	Challenges	SA	A	D	SD	MEAN	DECISION
1	Not enough ICT facilities for users at a time	27	65	26	22	2.69	A
2	Costly printing charges	67	23	34	26	3.07	A
3	Lack of capacity/competence	24	71	31	14	2.75	A
4	Inadequate and epileptic power supply	100	31	6	3	3.62	A
5	Inadequate ICT skills	34	62	23	21	2.77	A
6	Inadequate number of effective internet service providers (ISP)	24	45	47	24	2.49	R
7	Lack of Policy framework on ICTs in the country	31	42	34	33	2.50	A
8	Lack of ICT centres in the University and the Nation at large	20	41	40	39	2.3	R

Key: SA=Strongly Agreed, A=Agreed, D=Disagreed, SD=Strongly Disagreed, Criterion mean 2.50

The table 1 reveals the respondents' views on problems militating against the effective use of ICT facilities by students in the university libraries. Responses show the mean values ranging from 2.3 to 3.62. The respondents strongly agreed with items 2 and 4 (lack of funds and inadequate & epileptic power supply) as the greatest problems militating against the effective use of ICT facilities by students in university libraries. They agreed that the rest of the problems listed ranging from item 1, 3, 5 7 and 8 with mean scores of 2.69, 2.75, 2.77, 2.50 and 2.3. They disagreed more on items 6 (2.49), they strongly disagreed on the rest of items minimally.

Research Question 2: What are the prospects of ICT use in NDU libraries?

Table 2: Prospects of ICT use in NDU libraries?

S/N	Prospects	SA	A	D	SD	MEAN	DEC.
1.	Proper ICT seminars/workshops in the university	80	47	5	8	3.42	A
2.	Provision of sufficient ICT facilities	54	69	12	5	3.72	A
3	Provision of grants and aids by the government and university	49	52	21	18	2.94	A
4	Staff training and orientation	49	50	26	15	2.95	A
5	Government support on provision of stable power supply	71	41	19	9	3.24	A
6	Reduction of telecommunication/computer importation tariffs	62	42	20	16	3.07	A
7	Provision of adequate and effective internet services provider	58	48	24	10	3.09	A
9	Establishment of National Research Centre for ICT	68	47	14	11	3.22	A

Key: SA=Strongly Agreed, A=Agreed, D=Disagreed SD=Strongly Disagreed, Criterion mean 2.50

The table above shows the various strategies that could be adopted as possible solutions to the problems militating against effective utilization of ICT facilities in the university libraries. The respondents strongly agreed that all the strategies listed above could be adopted for effective solutions to the enumerated problems. These strategies include proper ICT seminars/workshops in the universities (3.42), provision of sufficient ICT facilities (3.72), government support on provision of stable power supply (3.24), reduction of telecommunication/computer importation tariffs (3.07), provision of adequate and effective internet services provider (ISP) (3.09), establishment of National Research Centre for ICT (3.22), while others agreed that provision of grants and aids by government and university (2.94) and staff training and orientation (2.95) could be possible solutions.

IV. DISCUSSION OF THE FINDINGS

The findings of this study were discussed under two sub-headings

Problems of ICT facilities use in NDU libraries

From the result of the study as presented in table 1 and aimed at identifying the factors militating against the effective use of ICT facilities by users in the Niger Delta University libraries, the following factors were identified: lack of ICT facilities, lack of funds, lack of capacity/competence, inadequate and epileptic power supply, high tariff in telecommunication/computer importation in the country, inadequate number of effective Internet Service Provider (ISP),lack of policy framework on ICTs in the country and lack of ICT centres in the university and the nation at large.

This finding agrees with that of Jamaal (2018) which found the poor Internet connection, electricity, technology support, high cost of ICT adoption and technology infrastructures, most significantly affect ICT adoption, however university willingness has a major influence of ICT adoption, adoption affected by technology to enhance learning at universities also affected by trust and motivation, the lack of necessary skills are affected to use ICT in most institutions.

This finding is also in tandem with Krubu and Osawaru (2011) which revealed some factors hindering the impact of ICT in Nigerian university libraries as lack of search skills,

epileptic power supply, expensive software and hardware, and huge amount of money spent to fuel generators. The finding supported Aina (2004) which identified the negative laissez-faire attitude of lecturers, students, and libraries as other factors militating against the development and use of ICT in university libraries in Nigeria. Furthermore, Aina admits the high cost of ICT training but opined that library staff and users should do something on their own to improve their IT skills.

Prospects of ICT use in universities libraries

On prospect to the problems of ICT use in university libraries, the respondents as shown in table 2 adopted most of the strategies suggested ranging from proper ICT seminars/workshops in the universities; provision of sufficient ICT facilities; provision of grants and aids by the government and universities; staff training and orientation; government support on provision of stable power supply; reduction of telecommunication/computer importation tariffs; provision of adequate and effective Internet service provider and more cyber cafes; the National Information Technology Policy to be revised and establishment of National Research Centre for ICT.

Odeh, (2011) cited Ezugwu (2006) which made the following recommendations to these challenges that there should be orientation and workshops organized for some few days to enable some older lecturers share ideas with newly recruited members. Mezieobi (2006) in support of this stated that: seminars, conferences, workshops and in-service training are to be invigorated as to extend teachers knowledge base and information of ICT education programme. That there should be total retraining of every academic staff in Information and Communication Technology,

This study finding is in agreement with Agboola (2009), Onyeneke (2007) and Audu (2006) who were of the view that there should be restructuring of the yearly orientation programme to meet the information use and retrieval needs of library users; tertiary institution should be well equipped with adequate, functional and well-furnished computer laboratories, especially in the library, with Internet facilities for students and lecturers to use; government should provide adequate infrastructure to ensure enabling environment for the use of ICTs, more Internet facilities be made available to

the students and students be taught Internet skills. This is collaborated by Amkpa and Abba (2010) who are of the view that, government should increase stability of and supply of electricity to meet the demand and that, training methods like lecture, group discussions etc. should be used as a remedy.

Implications of the study

The implication of the study is based on the findings and discussions. Information and communication technologies (ICTs) are of immense benefit to the University community. Several studies like Etebu (2010) and others researched the availability of ICT facilities in the Niger Delta University libraries and other Nigerian University libraries. But this research work dealt specifically with perceived problems and perceived prospects of ICT use alone.

The study discovered that, lack of ICT facilities, lack of funds, lack of capacity/competence, inadequate and epileptic power supply, high tariff in telecommunication/computer importation in the country, inadequate number of effective Internet Service Providers (ISP) were factors militating against the effective use of ICTs by library users. Government and the various university authorities should collaboratively provide the necessary needed ICT facilities; aids and grants; more stable power supply. Also the strategies for enhancing effective use of ICTs were proper ICT seminars/workshops in the universities and provision of sufficient ICT facilities which implies that there is urgent need to implement these strategies so that users can face the challenges of integrating ICTs in their academic activities. Government should also be geared toward reducing tariffs placed on ICT facilities importation, users should be given adequate orientation and training on ICT use.

The overall implication of this study is that there should be a general knowledge of ICT effective use in the University community, because it is one thing to recognize the importance of ICTs in academic libraries, another thing is to provide the required and relevant ICT facilities and know if they are effectively being used by the users. If ICTs are put to effective use, the essence of acquiring them is to a large extent justified. This is the basis for S.W.O.T. analysis.

V. RECOMMENDATIONS

Based on the discussion above is recommended that Government should show more commitment to universities and to the development of an ICT base in the country by making available special ICT grants to Universities on annual basis. Universities should supplement power supply for effective use of ICTs.

VI. CONCLUSION

Problems associated with effective ICT facilities use are crucial to information processing and retrieval in the present day libraries especially in an academic environment. This trend has continued to transform the pattern and scope of library services. Adequate ICT skills are prerequisite for users in order to benefit maximally and to be able to handle the facilities and process information effectively. Libraries should source funds internally for ICT projects among

others to sustain this global trend. In order to achieve effective ICT project in university libraries in Nigeria, adequate attention must be given to prospects proffered to curb the problems identified in this study.

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