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# THE APPLICATIONS OF INFORMATION TECHNOLOGIES (ITS) AMONG LIBRARIANS IN UNIVERSITY LIBRARIES IN SOUTH SOUTH ZONE, NIGERIA

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### ABSTRACT

This study examined the applications of information technologies among librarians in academic libraries in the South-South zone of Nigeria. The study adopted a descriptive survey design as research design. Findings revealed that most of the libraries studied have computers, networking, on-line searching, internet connectivity and electronic mailing. However, the application of ITs in most academic libraries studied has not been encouraging making it possible for users not to be satisfied with the applications of ITs facilities in academic libraries. Recommendations were made such as looking for alternative source of funding and the need for capacity building to help address the problem of ITs in the academic libraries.

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Keywords: Leadership, Change Management, Artificial Intelligence, Organizational Transformation, Qualitative Research, Content Analysis.

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### Introduction

Academic libraries in Nigeria will be leading to a gradual decline and becoming irrelevant because users are fast becoming aware that information is available from other sources. There can be no doubt that the success or failure of academic libraries in our contemporary society is measured by the extent of ITs (Oladapo, 2005).

The organization of information and how such information can be made available poses a challenge to information professionals. Idowu (2000) states that, "it is one thing to generate as much information as possible, and quite another thing however, to make such information accessible to others in the field when needed". Therefore, there is need for academic libraries to assist users to search for information.

The objective of this study is to examine the relevance of information technologies and how it can be applied to academic library services.

Poor academic library services have been generally identified as a hindrance to most academic libraries' activities in Nigeria. With the emergence of ITs, many users are now looking elsewhere for information making the academic libraries irrelevant.

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## Literature Review

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The challenges of proper collection, storage, processing, accessibility, retrieval and dissemination of information by academic libraries to appropriate users are for academic libraries to develop application of information technologies. The academic community is a repository of knowledge and the highest producer of information. Thus the academic libraries become relevant in the world's information system (Ikem, 2000). The need for resource sharing in libraries is as a result of the fact that academic libraries can no longer be self sufficient of their information resources. ITs make it possible for researchers to stay in his institutions library, through network or the internet without long correspondence. It makes it possible for thousands of academic libraries and information institutions to link, revolutionize the accessibility to data in computer by linking telephone lines to produce a communication network making many libraries across the world to be linked.

ITs have redefined the information environment in ways that pose technical, intellectual and ethical challenges to the library profession, including the nature of preservation and archiving, issues of information access, intellectual property and fair use. The library profession is evolving, redefining itself to meet the challenge of the changing environment (Omekwu, 2006).

The parts of information technology found in academic libraries today are automation, online searching, networks, Internet, electronic mail and electronic conferencing (Oketunji, 2000).

One way that the academic libraries have made ITs available to enhance their operations is by automation. Library automation can be defined as an integrated operation of production system that uses electronic computers to regulate and coordinate the quality and quantity of what is produced. It is the use of computers in library particularly the house keeping functions (Mutula, 2000). Mutula stated further that, 'the potential of computers to automate library procedures was recognized in the early 1950s in the United States when library systems were developed locally using local programming expertise. Librarians are the early entrants in the use of computers

(Omekwu, 2006). Computers are used in libraries in carrying out routine clerical housekeeping task of which form the essential foundation upon which the library services must be built. Example of such tasks includes acquisition, collection management, cataloguing, information retrieval, reference services, circulation, information dissemination and library administration.

The advancement in the world of telecommunications had led to the development of e-mail services, on-line database, worldwide network of information systems- the internet or information superhighway. Ajidahun (2004) carried out a study on the state of information technology in Nigerian university libraries. In this study, the researcher stated that the world is being reduced to a dynamic and veritable global village. This has come to be accepted as one of the unavoidable variables of the scientific world. Computers are gradually becoming household equipment. Academic and research institutions, are becoming more sensitive to the application of information technologies. The main objective of the study is to examine the state of information technology and library automation in Nigerian university libraries with a view to finding out the challenges facing libraries in their attempt to automate their services

The research design is a descriptive survey, which involved twenty-one university libraries in Nigeria. The research instrument used for the study is the questionnaire. The data were analyzed using simple percentages.

The main findings of this research showed that 120 (95.2%) of the university libraries had computers and printers-11 (35%) of the university libraries have not computerized any of their operations, while 8 (23%) of the libraries have automated some of their operations. The findings revealed that the level of computerization in the university libraries in Nigeria can be rightly concluded to be at the development stage.

Daniel et al (2003) carried out a similar study on forty years of ICTs library services to the nation. This study stated that until recently information technologies were unavailable and unaffordable in Nigeria. Only very few libraries had access to computers and most of them are located in research Institutes or international organizations.

The main objective of this study is to survey the state of information and communication technologies in Nigerian libraries' so as to know the progress achieved by libraries. Questionnaire was the main instrument for collecting the data used for this research study. Fifty questionnaires were administered. The study covers university, public, research, law, polytechnic and special libraries.

Another related study was that of Blakes (2006) on ICT availability and resource sharing. The objective of the study is to discover the availability of- ICTs facilities and resource sharing in some Nigerian university libraries.

Questionnaire was used for data collection administered to eight Universities. The University librarians were the respondents. The results revealed that eight tools were not available and used by the responding librarians in their libraries. These were computer software/programs, VSAT, modern telephone landline, telephone network, telex and fax machines. The study also revealed inadequacy of ICTs facilities for an electronic and telecommunication, transformation, and transmission of information systems or network system.

Faboyinde (2006) investigated the state of ICTs in selected libraries. In the study, the emergence of ICT has greatly shrunk the world into a global village that anyone or any organization, the library in particular, ignoring ICT is asking to be sidetracked in its place in the international arena. The study sees ICTs as a powerful tool that would link Nigerian libraries with libraries in the West and facilitate the ongoing revitalization of information acquisition and dissemination process.

The study revealed that most of the libraries studied have computers, have automated their system of operation, have Internet connectivity and operate in network environment. The study looked at the state of ICTs in selected libraries comprises of both university and non- university libraries.

This review is pointing out that ICTs has not only made it possible for computerization of university libraries but has facilitated the creation of electronic databases, networking, on-line searching, internet connectivity electronic mailing, CD-ROM searching, electronic conferencing among others in academic libraries. However, ICTs application in academic libraries has not been encouraging. Automation of libraries, has taken an integrated approach with a movement from

automating the traditional functions of circulation, acquisition, cataloguing, making it possible to include on-line public access, internet access, access to external databases and full electronic journals (Mutula, 2000).

### Theoretical framework

This study is anchored on Transformational Leadership Theory, which emphasizes vision, motivation, and adaptability (Bass, 1990), and Kotter's 8-Step Change Model, which highlights urgency, communication, and anchoring change in culture (Kotter, 1996). Integrating these perspectives provides a lens to examine how Nigerian leaders can guide AI adoption ethically and sustainably.

### Methodology

This study adopted a descriptive survey design. The instrument used for this study was the questionnaire administered to librarians in the South-South geo-political zone. The data obtained were analyzed using percentages.

### Population

The population for this study consisted of one hundred and eighty (180) librarians from the twelve public university libraries located in the South-South geo-political zone of Nigeria.

Responses	No of Respondent	Percentages
Computers	50	39%
Network system	30	24%
On-line searching	25	20
Internet connectivity	17	13
Electronic mailing	5	4
	127	100%

The table above revealed that 50 respondents, which represents 39% of the total population of librarians agreed to adequacy of computers while 24% believed in adequacy of network system, on-line searching 20%, internet connectivity 13% and electronic mailing 4%.

The entire population of 180 staff was used for this study. The questionnaire was administered to the 180 librarians located in the South-South zone. Of the 180 -questionnaire administered, one hundred and twenty-seven (127) were completely filled and returned. It is this one hundred and twenty-seven that were used for the study.

The results of the study are presented based on the research questions.

### Research Question One

How adequate are the implementation of ITs facilities in your library?

**Table 1: Adequacy of ITs facilities**

Responses	No of Respondent	Percentages
Computers	50	39%
Network system	30	24%
On-line searching	25	20
Internet connectivity	17	13
Electronic mailing	5	4
	127	100%

**Research Question Two.**

To what extent are users satisfied with the use of ITs' facilities in your library?

**Table 2: Use of ITs Facilities**

Responses	No of Respondent	Percentage
High	59	46%
Low	68	54%
Total	127	100%

Most of the respondents from Table two agreed that the use of IT facilities in uni  
agreed that the use of IT facilities is high.

Responses	No of Respondent	Percentage
Funding	5	35%
Inadequate training	30	24%
Lack of ICTs skills	40	32%
Inadequate ICTs facilities	12	9%
	127	100%

Table 3 above shows that most respondents agreed that the problem of IT implementation in the university libraries are funding 35%, lack of IT skills 32%, inadequate training of librarians 24% and inadequate IT facilities 9%.

## Discussion of Finding

The study showed that most of the libraries studied have computers, networking, online searching, internet connectivity and electronic mailing. However, ITs in university libraries has not been encouraging making it possible for users not to be satisfied with the application of IT facilities in the university libraries.

## Research Question Three

What problems are there in the implementation of ITs in the university library?

**Table 3: Problems in the way of ITs implementation**

Responses	No of Respondent	Percentage
Funding	5	35%
Inadequate training	30	24%
Lack of ICTs skills	40	32%
Inadequate ICTs facilities	12	9%
	127	100%

The emergence of IT has greatly shrunk the world into a global village that anyone or any organization, the library in particular, ignoring IT is asking to be sidetracked in its place in the international arena. IT Is a powerful - tool that would link Nigerian libraries with libraries in the West and facilitate the on-going revitalization of information acquisition and dissemination process (Faboyinde, 2006). The success or failure of academic libraries in our contemporary society is measured by the extent of ITs (Oladapo, 2005).

The finding of the study corroborated with that of Blakes (2006) on ICTs availability and resource sharing. The study revealed the inadequacy of IT facilities for an electronic and telecommunication, transformation, and transmission of information system or network system. Automation of libraries has taken an integrated approach with a movement from automating the traditional functions of circulation, acquisition, cataloguing, making it possible to include on-line public access, in ernet access, access to external databar.es and full electronic journals (Mutula,2000). The study also showed that the major problem facing the implementation of IT facilities in the university libraries is funding. This is followed by lack of IT skills.

## Conclusion

Academic libraries are to develop the application of information technologies to meet the challenges of proper collection, storage, processing, accessibility, retrieval and dissemination of information. It is evident from the study that academic libraries are fast meeting up with these challenges with the application of information technologies. However, information technologies in academic libraries have not been encouraging because users are not satisfied with the application of IT facilities. There are some factors identified as the major problems which academic libraries need to address aggressively if our users are to be satisfied so as not to look elsewhere. They include inadequate funding, inadequate training and lack of IT skills.

## Recommendations

Based on the findings, the following recommendations are made: That academic libraries need to look for alternative source of funding to help address the problem of funding.

That there is need for capacity building especially in the area of IT training and skills..

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