

# USE OF ICT IN SELECTED LIBRARIES IN IBADAN, OYO STATE, NIGERIAN

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## Abstract

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*This survey investigated the use of ICT in selected libraries in Ibadan, Nigeria. A structured questionnaire was developed to elicit information from the heads of the selected libraries on the use and application of ICT in their respective libraries. The data were collated, analyzed and interpreted based on standard statistical method. The results of the study revealed that libraries in Ibadan were at the developmental stage in the use of ICT for processing information services. This was found to be as a result of inadequate funding, poor infrastructural facilities and lack of requisite knowledge of ICT by most library personnel. Based on the outcome of the study, it was recommended that adequate funds be made available to the libraries for ICT implementations and library personnel be trained and retrained adequately to enhance ICT usage in libraries.*

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**Keywords: ICTs, Libraries, Ibadan-Nigeria, Use and Application**

## Introduction

Information and Communication Technologies (ICTs) have become inevitable with current and future social and organizational development. Libraries and information centres have been using ICT based resources and services to satisfy the diverse information needs of their users. The role of these technologies in national development is undeniably significant. As the positive effects of ICTs have continually been noted in developed countries, it has become critically important for developing countries of Africa to embrace these technologies. The United Nations Development Programme (2001) refers to ICTs as a “powerful enabler of development” because of the significant impact on the economic, scientific, academic, social, political, cultural and other aspects of life. In higher

education and human capacity building, there are significant patterns of change because ICTs have made it necessary for significant change in traditional concepts of teaching and learning, as well as prime motivation behind the change in scholarly and professional activities. Library systems have witnessed not only this increasing globalization of information services but also that libraries all over the world have extended information dissemination and management beyond traditional, institutional, national and regional boundaries. This globalization environment has made it important for libraries so strive to improve their quality of services. Thus it is a foregone conclusion that ICT is significant in the achievement of educational goals/objectives and the fulfillment of the primary tasks of library services. Hence, with this background came the realization that there was need for greater infusion of ICT knowledge and skills into users and staff of libraries, to enhance effective service delivery, as well as thorough diffusion of ICT competencies into library staff and users.

The accelerated adoption and use of Information and Communication Technology (ICT) has resulted in the globalization of information and knowledge resources. Bibliographic databases, full-text documents, and digital library collections are always available to users.

Sutton (2001), observed that the changes brought into the library and information services by ICTs can be divided into two major categories, namely; the natural evolutionary changes on the one hand, and transformatory changes, on the other. As *natural evolution*, the library and information science profession has harnessed ICTs to perform old tasks better through the automation of housekeeping tasks such as reference work, bibliographic services, cataloguing, serials, circulation and acquisition, which are performed more efficiently in an ICT environment. *Transformatory* changes, on the other hand, include the emergence of new functions arising out of an expanded, demand-driven information society, wider and/or interdisciplinary jurisdiction and closer focus on user needs. These transformative trends represent systematic changes that substantially alter the boundaries of traditional library services.

## Objectives

The objectives of this study are to

- Assess and compare the use of ICT in selected libraries in Ibadan
- Identify the factors that affected the level of the ICT usage in the selected libraries and
- Determine and compare the software used in the selected libraries.

## Literature review

The use of ICTs has caused significant changes in library services: automated cataloguing, circulation, information retrieval, electronic document delivery, and CD-Rom databases, to mention a few. Ostrow (1998) opined that the advent of the internet, digitization, and the ability to access library and research materials from remote location created dramatic changes by the end of the twentieth century. Ramzan (2004) also observes that expert systems, wireless networks, virtual collections, interactive web interfaces, virtual reference services, and personal web portals have brought changes since the start of the new millennium. There have been fast and significant changes in librarianship, where digital and electronic libraries complement, and in some cases replace, traditional libraries. Sharman (1999) in presenting a case study on the role played by ICT in special library in India, discussed various library activities and services where Defence Science Library had used ICT to provide better and enhanced resources and services. Alli (2004) discussed the need for training of library professionals to make use of the ICT based resources and services optimally.

Fourie and Bothma (2006) observe the increased use of the World Wide Web in private social, business lives of many people and hence noted that it is a vital component of the enabling structure for school, university, career and other use for information and communication. This platform exhibits the fact that those involved in information services need to be sufficiently prepared to handle both the users of information and the attendant technologies. Thus, knowledge of networking, communication and retrieval systems has become central to the services. As distinctions continue to manifest between telephones, television and computers, information professionals have to be able to navigate information networks competently so as to provide relevant services and materials for their users, (Curry,

2000). There is a lot of literature on the use of ICT in Africa, which reports on the rapid growth of ICT use, especially in urban areas. Jensen (2002) provides an updated overview of ICT development on the continent and observes that prohibitive cost and sparse and unreliable telecommunication networks form the major hindrance for many people in Africa. Thus, in spite of the general worldwide decreases in the hardware prices and development of open sources software, many libraries in Africa are yet to match with their counterparts in the developed world. (Chisenga 1999). Hewiston (2000) in his study showed a direct link between electronic information resource use and perceived information technology competence. Hewiston also found out that the internet was the most widely used service and electronic indexing; abstracts and electronic journals were not heavily used. In the research work of Vicente et al reported by Mohamed (2007), it was found that the internet was the most widely used source which some respondents viewed as a more appropriate source of vocationally oriented information than passworded databases. The study further stated that the non use of electronic information was due to difficulty of access or use. Adams and Bonk (1995) found that the most common obstacles in the use of ICT resources in libraries were lack of sufficient resources, the absence of information about specific resources and lack of training.

Various studies have examined the advantages of the use and application of computers to organizational work (Brown, 1975; Akinyotu, 1977; Edeka, 1983). The benefits of computers for library operations cannot be overemphasized. Their value includes speed, storage capacity, links resources and accuracy of record management.

Libraries in Nigeria offer diverse information resources and services such as selective dissemination of information and user training. The libraries subscribe to e-journals, CD-Rom databases, web based resources and other forms of electronic resources. Most libraries are building up digital libraries. However, despite the availability of wide opportunities offered by the advent of ICT, it is observed that many of these facilities and resources are not fully utilized by users. Considering this fact, it is therefore necessary to investigate and assess the use of ICT facilities in selected libraries in Ibadan, Nigeria.

## Methodology

The survey method was used for the study. A structured questionnaire was administered to the Head of the selected libraries. This study adopts a descriptive survey method. The essence is to be able to describe the use of ICT facilities and ICT based resources in the selected libraries in Ibadan as well as to determine which of the ICT facilities are mostly used in the surveyed libraries. Table 1 shows the list of surveyed libraries. These libraries were selected based on the following considerations.

- The nature and type of the library i.e. academic, research or special
- The geographical spread of the libraries reflecting Ibadan region
- The availability of ICT facilities and
- The age of establishment of the libraries (not less than ten years)

**Table 1: List of Surveyed Libraries**

<b>Name of library</b>	<b>Types of library</b>
Kenneth Dike Library, University of Ibadan	Academic
The Polytechnic, Ibadan Library	Academic
International Institute of Tropical Agriculture, IITA Library	Special
Immanuel College of Theology Library, Ibadan	Special
SS Peter And Paul Seminary Library Bodija	Special
Forestry Research Institute Of Nigeria Library	Special
Lead City University Library, Ibadan	Academic
Nigeria Institute of Social and Economic Research Librarian	Speical

The selected libraries in this study form two categories of libraries namely academic libraries and special/research libraries. All these libraries were censured and within each library, librarians were also censured. A librarians, in this study, is assumed to mean a full time time professional who runs the affairs of the library as

head of the department. The questionnaire was divided into four sections namely section A, B, C and D. section A contains Demographic variables of the respondents. The items included in this part were respondents age, gender, highest educational qualification, department/section/division and length of service. Section B comprises questions aimed at eliciting facts about the ICT facilities in the respective libraries. Section C comprises questions on the usage of the ICT based resources while the last section of the questionnaire is made of questions relating to the factors affecting the usage of ICT in libraries.

### Findings

The outcomes of the survey are presented as follows. Table 2 shows the libraries under study as well as the number of librarians in each of the libraries. From the table, Kenneth Dike Library has the highest number of librarians closely followed by Lead City University.

**Table 2: List of the Surveyed Libraries and Librarians**

<b>Libraries</b>	<b>Number of librarians</b>
Kenneth Dike Library, University of Ibadan (KDL)	21
SS Peter And Paul Seminary Library (SSPLIB)	2
The Polytechnic Ibadan Library (POLYLIB)	8
International Institute Of Tropical Agriculture Library (IITALIB)	4
Immanuel College Of Theology Library (ICTLIB)	2
Nigerians Institute of Social and Economic Research Library (NISERLIB)	5
Forestry Research Institute Of Nigeria Library (FRINLIB)	2
Lead City University Library (LCUL)	20

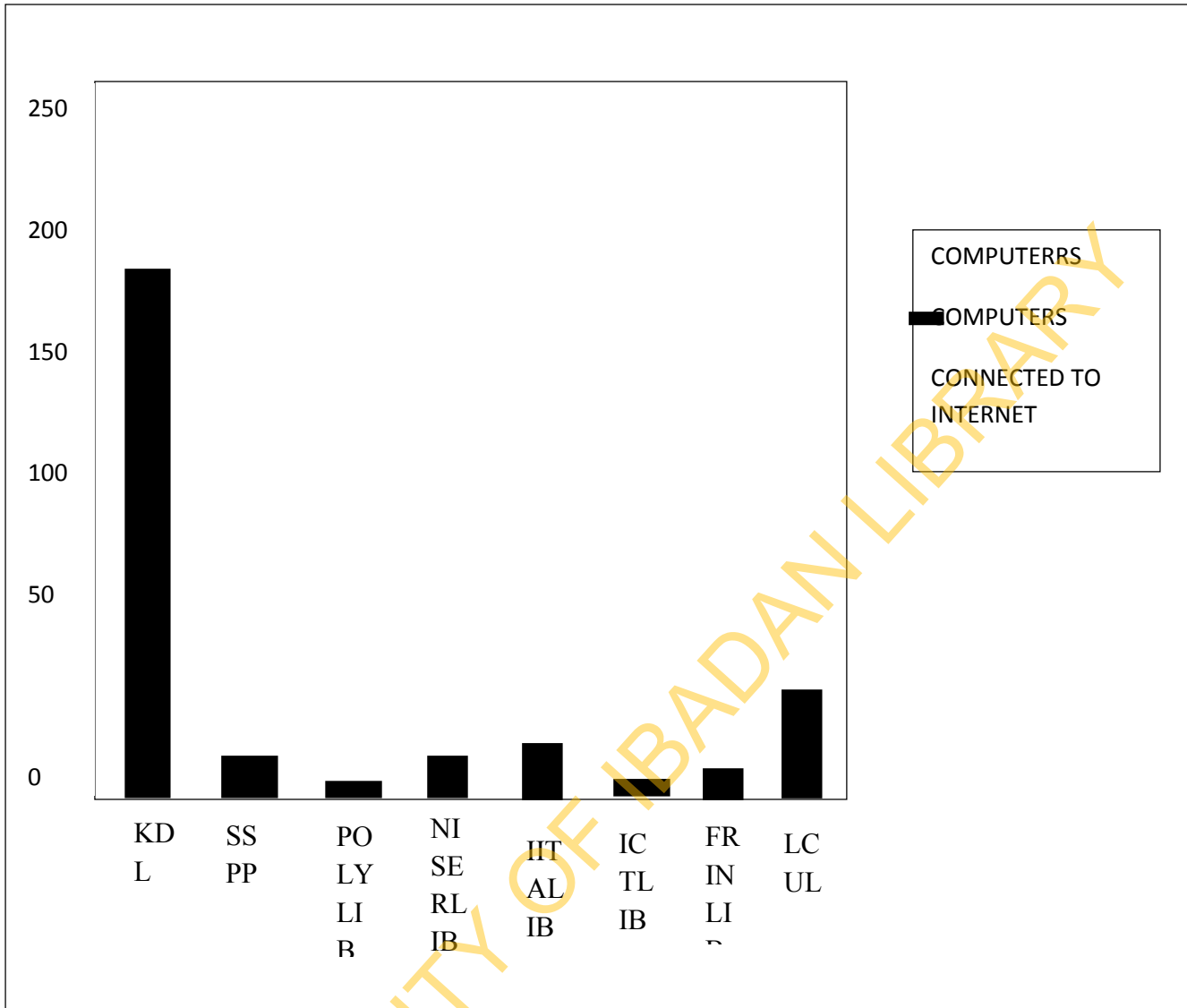
### ICT Resources of Surveyed Libraries

The libraries in this survey use various types of electronic equipment and communication technologies to ensure the smoothness of library activities as evident in the table below.

**Table 3: ICT Facilities of Surveyed Libraries**

Library name	KDL	SSPLIB	POLYLIB	NISE RLIB	IITALI B	ICTLIB	FRINL IB	LCUL
Computers	227	8	16	11	16	10	8	37
Computers connected to internet	177	8	3	9	15	3	5	37
CD-Rom	Nil	Nil	Nil	Nil	1	2	Nil	Nil
Photocopier	10	2	1	1	2	2	2	6
Printer	10	1	3	2	1	1	2	2
Scanner	6	1	1	2	5	Nil	1	3

From table 3 above it can be seen that there is a difference between the number of computers acquired by the surveyed libraries and the ones connected to the internet. This is further illustrated in figure 1 below. Only two of the surveyed libraries still use CD Rom databases while the other ones make use of online database.



### Use of Library Software

In order to create and maintain a database, the libraries in the surveyed used different types of software. The following tables shows the software used by the surveyed libraries.



**Table 4: Software used by the Surveyed Libraries**

Library name	Type of software
KDL	CDS/ISIS, Alice for windows, VTLS
POLYLIB	LIB +
ICTLIB	CDS/ISIS
NISERLIB	KOha
SSPLIB	Book collectors
IITALIB	In MAGIE/Textworks
FRINLIB	CDS/ISIS
LCUL	Nil

### Internet infrastructures

The internet plays a vital role in libraries. It can be a virtual library where the world's information resources are gathered for the use of the clientele. It has broken down the distance barrier in communication. The use of internet facilities greatly influenced information access in the library systems. The respondents were asked to indicate internet access in their respective libraries. The result is shown in table 5 below.

**Table 5: Internet Infrastructure**

Library name	First internet installation	No. of computers	Average user/day
KDL	2003	177	550
SSPLIB	2007	8	42
POLYLIB	2003/2004	3	12
NISERLIB	2007	11	30
IITALIB	1984	15	50
ICTLIB	2009	3	15
FRINLIB	2007	8	18
LCUL	2006	17	65

### ICT-Based Library Activities

The respondents of the surveyed libraries were asked to indicate which of the ICT based activities they use in their respective libraries. It was found that libraries in

the survey use ICT in activities such as data processing, communication, circulation, cataloguing, bibliography, serials controls and creation of in-house database.

### ICT-Based Library Services

Most of the surveyed libraries provided computerized service to users, while some are not yet able to do so. One of the special libraries-IITA library-provided ICT-Based services, while the others are not as advanced in the provision of computerized library services to their clientele. The following table illustrates the different services provided by the libraries under study.

**Table 6: Library Services performed with ICT**

ICT-Based Library services/activities	Name of library							
	KD L	ICTLI B	POLYL IB	SSPL IB	FRINLI B	NISERL IB	IITALI B	LCUL
Internet Browsing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
photocopying	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Document scanning	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Online searching	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Online information service	Yes	No	No	No	No	Yes	Yes	Yes
Database searching service	Yes	No	No	No	No	No	Yes	No
CD-Rom searching	Yes	No	No	No	No	No	Yes	No

## **Factors Affecting ICT Usage Libraries**

The respondents were asked to indicate factors responsible for the level of usage of ICT facilities in their libraries. The result showed that most of the surveyed libraries considered inadequate funding as a major factor that militate against the use of ICT in libraries. Other factors as expressed by the respondents are epileptic power supply as well as low level of technical knowledge of staff and other library personnel.

## **Discussion**

The use of ICT in libraries in Ibadan, Oyo state, is a growing stage as seen from the result above that most of the libraries surveyed have low level ICT facilities except for Kenneth Dike Library which has gone a little further than any of the other libraries under study. The use of ICT is now the backbone on which essential library services are based. This study has revealed that although there is still room for improvement, libraries in Ibadan are heading towards full automation. There is a clear distinction in the use of ICT between academic libraries and special libraries in the survey. The reasons for the contract were noted to be lack of infrastructure and inadequate funding of the education sector in the country which has made it extremely difficult for the libraries to procure adequate ICT facilities. The study further observed that a major factor which militates against the use of ICT in Ibadan is the erratic nature of electricity supply as well as high cost of fuelling generators. It can be stated that libraries in Ibadan are in the developmental stage of ICT exploitation and consumption, even though they still have a long way to go when compared to their counterparts in the developed world. This is in consonance with the submission of Moahi (2006) that the library and information service environment in much of sub-Saharan Africa is still basically traditional, but becoming more and more ICT-driven following trends in the rest of the world. However, complete diffusion of ICTs into the library systems has not been achieved because most of the libraries have issues with inadequate funding. The problems are to be found in the overall ICT infrastructures both at national and institutional levels, as well as individual library's equipage of appropriate hardware, software and expertise.

## Conclusion

The information requirements of libraries demand that for effective service delivery, all libraries in Nigeria in general and the selected libraries in Ibadan in particular should move with the growing trend by replacing the traditional system of library services with the one brought about by the advent of information and communication technologies. With this in place, the aims and objectives of libraries will not only be achieved but also the libraries will be able to compete favourably with their counterparts in the developed world.

For this to happen however, it is recommended that efforts should be made by the government of Nigeria to have stable and uninterrupted power supply as this is panacea to any ICT development since ICT depends on electricity. The issue of inadequate funding of government owned institutions should be considered by complying with the UNESCO's recommendation of 26% of the annual budget to education. With this in place all government-owned institutions will be able to improve their infrastructure facilities and by extension, libraries will also meet their developmental obligations regarding ICT.

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