

Use of Information Technology Resources: A Case Study of Osun State University Library, Nigeria.

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Abstract
The Study examined the use of Information Technology Resources in Osun State University Library. It investigated the resources used for the information technology and evaluates the availability, the accessibility and readiness of Osun State University Library Professional staff in using information technology in rendering services to the staff and the students of the University. The Study revealed that, despite the fact that the information technology has been put in place in the library to perform certain library routines, majority of the professional librarians were not using CD-ROM to enrich their work as well as encouraging the users i.e., staff, student and the researchers to use the CD-ROM for their research work.
The study also revealed that the internet connectivity in the library is very slow, not encouraging and that there was problem of power outage. The study recommended that a breed of experts and continuous training programme to handle and operate the latest technology in libraries is a dire need, provision of fiber and dedicated internet for the library with a back-up internet plan should be provided. Also standby generating set and Inverter should be provided for the smooth running of the University Library.
Keywords: Framework, Information Technology, University Library, Readiness Assessment

1. Introduction

Libraries of most institutions of higher learning in Nigeria are still stocked with physical books. This method, considered archaic, is no doubt inhibiting learning and knowledge. Trends are thus shifting from this format to digital or multimedia library. According to Roy Karuyan "Library automation started in late 70s in few special libraries and has now reached most of the university libraries". The software used for this purpose is known as Integrated Library System (ILS). ILS is yet to be adopted in some university. Libraries in some part of this continent owning to various problems. Part of the interesting functionality of this software includes management of Digital Library. A digital library is a library in which collections are stored in digital formats (as opposed to print, microform, or other media) and accessible by computers. The digital content may be stored locally, or accessed remotely via computer network. Efficient, effective and innovative information technology (IT) is a key enabler to achieving well-managed information in support of policies, programs and services.
Libraries are repositories of knowledge. The library is the resource centre of any institutions or establishment, a depository of information that we can consult to expand upon and enrich the work of the individuals and bodies, that is, the library is the meeting point for reconciliation of innovations (Edoka, 2000). Libraries, therefore constitute social institution which exist for the collections, preservation and transmission of human knowledge or human intellectual experience and culture. Information technology (IT) is an ambitious term that combines computer and telecommunication technology. It is concern with the technology used in handling, acquiring, processing, storing and disseminating information (Aina, 2004). The use of computers and telecommunication technologies on information handling and processing has arisen because of the increased work load involved in coping with information explosion. In order to keep pace with handling the increasing number of information, computers are utilized to handle information processing with speed and accuracy than manual processing. Access to information processed by computer is instant. It can also be accessible over long distances regardless of where the information is being processed. This is made possible through telecommunication technology.
The information technology found in libraries today can be divided into three categories; computer, storage media and telecommunications. A computer performs processing operation on data, and is used to store and retrieve information, process transactions, sort data, etc. Since the Central Processing Unit (CPU) of a computer has a definite amount of data capacity, it requires additional storage media, such as magnetic disk and tape, audio-tape. A disk is the most common auxiliary storage device. Telecommunications facilitates the transfer or communication of data and information. In most of the university libraries today, there is lack of integration among library operations and supporting information technology resources that leads to inefficiencies and duplication. Technology expertise is the combination of knowledge and skill needed to apply technology for efficient and effective performance. Development of computers, electronic equipment and telecommunication are bringing information technology to all aspects of work and leisure. These developments are focusing our

attention on storage, retrieval and use of information the way we communicate with each other, with ourselves and with the world

1.1 Statement of the Problem

The development of Information Technology (IT) is essentials for the rapid growth of any University Library, particularly in the 21st century we are currently witnessing. It is worth noting that, in achieving this, there are prices to be paid in terms of man power development, funding, staff training, setting up a sustainable platform implementing IT in respect of infrastructural development, electricity back up plan, and lots more. The application of information technology at Osun State University Library in performing library routines are not adequate, as a result of this, the study seeks to investigate the use of Information technology in terms of what is presently on ground at Osun State University Library and to improve on important components of IT and its allied.

1.2 Objectives of the Study

This study is designed with the following objectives in mind to:

. Identify the readiness of Library Staff to use the available information
Technology facilities and resources
. Identify the Information technology facilities and resources available and accessibility in the library
. Identify the Information technology facilities and resources used by the staff
. Assessing IT infrastructures that are currently in existence and how to improve On them in order to guarantee a sustainable platform for successful deployment of IT in the library
. To identify key technologies that have been demonstrated to work

1.3 Research Questions

. What impact has the use and adoption of IT had in the services being rendered in the library on daily basis vis a vis information services delivery outcome?
. What are the Information technology facilities and resources available and Accessible in the library?
. Does IT deployment in Osun State University library have positive influence in terms of enhancing information services delivery?
. What are the Information technology facilities and resources used by the library Staff?
. What are the factors encouraging or discouraging the use of these facilities and Resources?
. How is Osun State University library handlinh the risks involved in implementing IT in the library?

1.4 Scope of the Study

The study will focused on investigating the use of Information Technology, using Osun State University library as a case study and this comprises all the six campuses in Osun State University Library.

1.5 Significance of the Study

The study is significant on the following basis:

1. The data generated could be used as an index to agitate for advanced Information technology application support from the University management.
2. The findings of the research will provide information that the library management can use to improve on technological know-how of the library system.
3. The study will expose the readiness level of the Information technology used by the library staff of Osun State University library.

1.6 History Background of Osun State University

Osun State University (UNIOSUN) was licensed by the National University Commission on December 21, 2006, as the 30th State University and 80th in Nigeria.

UNIOSUN is a conventional University envisioned to be a centre of excellence through the provision of highly qualitative Teaching, Learning and Research (TLR) outputs that will engender the production of well- rounded entrepreneurial graduates, capable of impacting positively on their environments while also being globally competitive. The mission, which flows from the vision, is to create a unique institution committed to the pursuit of academic innovation, skill-based training and a tradition of excellence in Teaching, Learning and Research (TLR) and Community Service.

UNIOSUN is a multi-campus institution operating collegiate system. There are eight colleges in six (6)

campuses, located in the six (6) geographical zones of the state. These are presented in the figure below:

Osogbo Main Campus	College of Health Sciences; College of Science, Engineering and Technology; Centre for Alternative Energy and Rural Technology
Okuku Campus	College of Management and Social Science; College of Human Resources Management; Centre for Climate Change and Environmental Research; Centre for Applied Management Studies.
Ikire Campus	College of Humanities and Culture
Ejigbo Campus	College of Agriculture; Centre for Pre-Degree Studies (Science)
Ifetedo Campus	College of Law; Centre for Entrepreneurial studies; Centre for Pre-Degree studies (Arts & Social Science)
Ipetu – Ijesa Campus	College of Education

FIG. 1: Eight Colleges Located On Six (6) Campus With Attached Library To Each Campus

1.7 Osun State University Library Brief

Osun State University Library is as old as the university itself. The initial library holdings acquired about August/September 2007 was five hundred and twenty (520) volumes which was coordinated by a Consultant Librarian (Dr. M.A. Olaosun). The Library has built on this through acquisition of library materials that came from various sources, such as personal donations, gifts from other institutions, including Babcock University, the National Universities Commission (NUC), and purchases from publisher, book agents and vendors. The Library is also developing its virtual library and has subscribed to the World Library Services that make available e-journals, ebooks, magazines and other reference and research materials.

Presently, the library's holdings have grown to fifty two thousand (52,000) volumes of books with Journal subscriptions of over 1,230 titles. Professional staff rose to twelve (12) and most of the library's functions were computerized. KOHA, an Open Source Integrated Library Management System Software, was installed to network all campus libraries and is in use for cataloguing and handling other library services.

The Library is connected to the Internet and many databases which the library has subscribed to are available online for the use of the patrons of the library. These databases include: Health Information Network Access to Research Initiative (HINARI), Access to Global Online Research in Agriculture (AGORA), Online Access to Research In Environment (OARE), EBSCOHOST, JSTOR, Nigeria Virtual Library, Ajol (African Journal Online), Lexis-Nexis, Questia e.t.c which are highly relevant, up –to-date and useful to students, staff and Researchers alike in their various disciplines/programmes.

2.Literature Review

Technology has an impact on the presentation of information and related information services. Technology influences change in the structure and format of information resources (Roy Karuyan, 2011). Traditional formats for government publications, library catalogs, thesauri, microforms ,bibliographic sources, and even monographics are being challenged by computer-based alternatives. Computer-based information resources are still in a state of infancy. Attention is just beginning to be placed on full-text information sources, computer databases that combine multi-media formats, and computer-based hypermedia which stores information that combine text, sound , graphics and moving pictures and degree interconnected through multiple points of access for a great degree of user interaction (National Rural Health Resource Center, 2011). There is also increased reliance on automated systems for library and operations such as acquisitions, networking and interlibrary loans, serials control, catalogs and reference services.

Academic libraries are libraries of tertiary institutions like universities, polytechnics, college of education, major seminaries and comparable theological colleges, colleges of agriculture, college of forestry, college of fisheries and so on. Academic libraries are primary established to provide literature support to the programmes of their parent institutions. For example, if a tertiary institutions is offering degree, diploma and certificate courses, its library is expected to provide educational research and information materials in the relevant subjects to suit each level of the institutions academic programmes .According to Wikipedia(2012) the free online encyclopedia, "Advances in technology result in major highly visible changes in library and information work. Every type of library and information setting is affected by technology. A major issue in higher education is the relationship between the library and the computer centre in providing information services on campus". Another is the impact of technology on curriculum and resources management in colleges and universities.. In other settings like the

archives, school library media centres, public libraries and information services in business and government, services and management are similarly influenced by technological change.

CD-ROM has emerged as a major technology for providing access to a range of information systems, such as bibliographic retrieval systems, databases, library catalogs and full-text systems. Optical disk technology in the form of CD-ROM is clearly the technology of the present. CD-ROM is viable and being applied in all types of libraries, in business and government situation and across subject areas.

Stewardship of information and technology encompasses fiscal responsibility in meeting client needs and expectations both internal and external to an organization. This includes ensuring that technical solutions and information management practices are respectful of individual privacy and that information is secured from unauthorized access(Government of Canada, 2011). Both information and technology must be developed, deployed and managed in appropriate formats. This facilitates usability by all those accessing library services, including persons with disabilities. Additionally, it ensures the support of the provision of services and information in many official languages, while respecting individual and collective rights. IT is a key enabler and must also be well managed within a strict library case and project management disciplines.

The management of information and associated technologies is guided by a commitment to some principles. Information must be vigorously managed throughout its life cycle, regardless of medium or format, for as long as it is required by department to meet their operational and fiscal responsibilities, legal obligations, and accountabilities. This means ensuring the strategies are in place to ensure that information is current, complete and accurate. The world of information has witnessed a tremendous transformation in the last few decades. This transformation is reflected not only in the nature of information resources, the information service manager have to organize and grappled with but also in the manner information is now packaged and delivered to meet the modern day needs of users. The internet (connected computers) have changed/revolutionalized information sharing and exchanged of information by its users, all over the world (Gbaje, 2011).

Libraries are using IT to automate technical services, to provide efficient reference and information services, to network operations, such as cataloguing, control interlibrary loans, and international bibliographic project. If properly utilized, Information Technology helps the growth and development of libraries in different directions. As libraries are mainly stored/houses for books documents, periodicals and other printed materials, their day-to-day operations are centred around keeping records of these materials, classifying them and organizing their dissemination and storage. Since many of these operations are merelt routine processes they can be automated, quite possibly with the aid of some electronic data processing equipment. Library operations which have been automated through the use of computers are seen in the areas of acquisitions and order work, circulation procedures, serials work, in most of its aspects, and cataloguing (production of book catalogues, cards catalogues, etc). It is an accepted fact that knowledge is imperative for the growth and development of both man and society. The internet is the means of getting this knowledge delivered/transferred instantly. The internet involved the exchange and sharing of information by people through the means of telephones and information technology tools, like modems and computers (Tilburg University, 2007).

The library in this era needs to redesign the services and revision must be done to the information profession to meet the ICTs deve- lopment and to give the chance for the library to grow from the regular types of libraries to the universal information services, and from a conservative library to a modern virtual library. (Roy Karuyan, 2011). This increase of information technologies and the explosion of available information are the most obvious changes in academic libraries. The amount of human knowledge is doubling almost every five years; the number of students has almost doubled since 1970's, same for the number of teachers and researchers with large diversity of user groups. And library users must learn to use different databases and interfaces successfully to be part of the knowledge expansion.

Information providers are now more diverse and the academic library is not only provider in the higher education market like before. Users can get their information from other information providers. Using the internet, they can access volume of information over the computer without coming into the library building or interacting with a librarian at all.(Bolaji Yusuf, 2011). In addition, libraries are now faced with competition from traditional bookstores like online bookstores such as Amazon.com. The revolution in information services that is taking place in academic libraries makes it essential that libraries design new services that meet the user's needs better than other providers.

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3.Methodology

The sample population of this study were the academic librarians, the library officers and system analyst in Osun

State University Library, Osogbo, Nigeria. They were drawn from all the six campuses of the University Library. The purposive sampling method was used to select all these categories of respondents who were twenty in number. The data collection instrument used for this study was a questionnaire designed by the researchers. This included the background and general information, the readiness to use information technology and the assessment of information technology.

4.Results and Discussion

The data generated from the study are presented in tables and discussed below.

4.1Background Information

Table 1 shows the distribution of library staff in Osun State University. The data revealed that 13(65%) of the respondents were Librarians, 6(30%) were Library Officers and only 1(5.00%) was a System Analyst.

Table 1: Library Staff Distribution

	Frequency	Percentage
Professional Librarian	**13**	**65**
Library Officer	**6**	**30**
System Analyst	**1**	**5**

4.2.Technology Resources Used by Staff

Table 2 gives the analysis of Information technology facilities and resources used by the library staff. The data reveals that 13(65%) of the respondents were using the library software (KOHA) to perform library routines, 19 (95%) were using electronic mails to communicate with professional colleagues and library users, 18(90%) were using OPAC to indicate where materials are located on the shelves, 8(40%) were using CD-ROM to find needed information for library users and probably needed for their academic research, 15(75%) were using e-journals for library users and to enrich their work, 15(75%) of the respondents were using the Internet connectivity in the library. Further analysis revealed that librarian constituted the major users of these facilities and resources. The data collected clearly showed that E-mail (95%) and OPAC (90%) were the most used followed by Internet (75%). E-journals (75%) and Library software (65%) while the CD-ROM (40%) constituted the least used to perform routine task in the library

Table 2: Information Technology Resources Used by Staff

Resources	Frequency (N=20)	Percentage (%)
Library Software	13	65
E-mail	19	95
OPAC	18	90
CD-ROM	8	40
E-Journal	15	75
Internet	15	75

4.3.Availability to Use Information Technology

The respondents opinions were sought on the availability to use information technology to enrich their daily activities in the library. Table 3 shows that 18 (90%) of the Internet resources were available to use in searching for information in the library, 15 (75%)) of OPAC resources were available for use by the library staff including library software to perform library routines daily in the library. It clearly shows that most of the respondents usually used electronic mail to com- municate with their professional colleagues . This table clearly shows that most of the Information technology resources were available for use by the professional librarians and library officer including the System analyst.

Table 3: Availability to Use Information Technology

Resources	Frequency (N=20)	Percentage (%)
Internet	18	90
OPAC	15	75
Library Software	15	75
CD-ROM	9	45
E-Mail	19	95

4.4.Accessibility to Use Information Technology

Table four (4) gives the analysis on the accessibility to use Information technology by the library professionals. 18(90%) of the respondent have access to the Internet, 15(75%) also have access OPAC (I.e ,Online Public Access Catalogue), 18(90%) were able to use e-mail to send and received messages and 15(75%) also have access to electronic journals in the library.

Table 4: Accessibility to Use Information Technology

Resources	Frequency	Percentage (%)
Internet	18	90
OPAC	15	75
E-Mail	18	90
CD-ROM	8	40
E-Journals	15	75

4.5.Readiness to Use Information Technology

The respondents opinion were sought on the readiness to use information technology to enrich their daily activities in the library. Table 5 shows that 18(90%) of the respondents were using internet in searching for information in the library, 15(75%) were using OPAC and library software to perform library routines daily in the library, It clearly shows that most of the respondents usually used electronic mail to communicate with their colleagues. The table below shows that most of the professional librarians and library officer including the system analyst were not using the CD-ROM database in enriching their academic research in the library.

Table 5: Readiness to Use Information Technology

Resources	Frequency	Percentage (%)
Internet	18	90
OPAC	15	75
Library Software	15	75
CD-ROM	9	45
E-Mail	19	95

4.6.Factors Affecting the Use of Information Technology in the Library

Below table shows that Unstable Internet Connectivity was one of the major factors affecting the use of Information technology in the library and which were revealed by 19(90%) of the respondents, 19(90%) of the respondents also revealed Power outage/ Power failure as one of the factors, 9(45%) of the respondents shows that Standby generating set were not provided at the appropriate time and 20(100%) of the respondents revealed that no inverter was provided for the library by the University Management.

Table 6: Factors Affecting the Use of Information Technology

Resources	Frequency	Percentage (%)
Unstable Internet Connectivity	19	90
Power outage	19	90
Standing Generating Set	9	45
Inverter	20	100

4.7.Assessment of Information Technology

This table is a reflection of the level of assessment of information technology in Osun State University. Table 4 revealed that 17(85%) of the respondents have access to CD-ROM database in the library but they were not fully utilize by the professionals while 15% of the respondents claiming that they do not have access to it, 16(80%) of the respondents were not encourage concerning the slow motion of the internet in their library, agree that the rate at which the internet was very slow was not encouraging, 14 (70%) of the respondents were able to use the library software to perform the library operation while 30% were not agree. 18(90%) of the respondents agree that their OPAC is functioning very well and they were able to use the OPAC in rendering services to their clients in the library effectively while 10% of the respondents were not agree.

Table 7: Assessment of Information Technology

Resources	Frequency (N=20)	Percentage (%)
CD-ROM	17	85
Internet	16	80
Library Software	14	70
OPAC	18	90

5.IMPLICATION OF THE STUDY

The study revealed that Electronic mails (95%), OPAC(90%), Internet(75%), and E-journals(75%) and Library software(65%) were most used resources. The least used is the CD-ROM(40%). The study also revealed that Internet, E-mails, E-journals and Library software were readily available and accessible to most of the respondents. The study revealed that, majority of the library personnel were not using CD-ROM to enrich their work and those of the library users. The study further revealed that the koha library software was fully used by the professional librarians in performing their daily routines in the library.

The study also revealed effective use of OPAC by the library staff which serve to point out to library users where a particular material is being located on the shelf. The study at the same time revealed that there were factors hindered the use of Information technology to perform some tasks and these includes; Ustable Internet connectivity, Power outage/ Power failure, Standby generating set and Inverter were not provided at the time of these investigations.

6.CONCLUSION

The findings of this study suggest that about one third of the sample population were not making use of the CD-ROM in their library to enrich their academic research work. Despite the fact that the respondents are readily using internet to search for information in the library, they were hindered by some problems, among which is lack of power failure. Lack of perso- nnel in the server room is another hindrance in acces- sing the internet maximally in the library. The find- ings also revealed that library staff were using e-mail effectively to communicate with their professional colleagues elsewhere. Some other challenges that faced the library staff in using information technology as an application in carrying out daily routines in the library is lack of electricity/power failure. Another one is the need of more trained staff to help the users and to improve the use of e-collec- tion. Then, lack of ICT training, establishing a digital library without refreshing the information technology and information retrieval skills of library professio- nals is a difficult task.To encourage a better use of I.T and to evaluate the information technology use in the library, the following recommendations are suggested.

7.Recommendations

i.The University Library should be provi- ded with a standby generating set in case of any electricity failure.
ii.The Professional staff in the library should be information technology oriented, that is, application of informa- tion technology to carry out library routines should be encourage among the library staff.
iii.There is need to improve staff ICT skills and expertise, because there is lack of such expertise in working librarians.
iv.A breed of experts and continuous training programmes to handle and operate the latest technology in libraries is a dire need.
v.There should be provision of fiber and dedicated internet for the library with a back-up internet plan.

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