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Impact on ICT Utilization on Library Services in Academic Libraries

by

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Abstract

Effectiveness of a library services is now largely depends upon the information and communication technology (ICT). This study attempt to explore the gradual advancement of modern technology in libraries distinguish old and new technologies. The study endeavor to identify various components of ICT which are used or being used in libraries and information systems. The study identifies exact reasons to use computer and related technologies in libraries. It also delineate the functions, impacts and challenges of ICT based library system.

Key: Information, Communication Technology, Impact, Librarians Services,

INTRODUCTION

Before now the library was seen as mere stockroom of knowledge. These days information communication technology has reorganized library routines. Library practice that was done by hand is now being handled with ICTs. Information technology has change the system of acquisition, technical processing and circulation activities in library in a way that library patrons can get entry to their information. It is obvious that without computers and internet it will be difficult for libraries to provide their clients with sufficient information in this age of information technology. Information communication and technology has changed the entire planet into a global village. This has hastened electronic librarianship with different library amenities and services to its clientele. The idea of electronic libraries OPAC, Hypertext, and teleconferences for the use of library and information services have become universal. Innovative scientific developments have deeply affected libraries and practically every task performed in a library has been taken over by electronic mechanization and telecommunication.

With the use of ICT facilities like the World Wide Web, and Internet connectivity, individuals can access information from unlimited sources. It also gives users opportunity to work at their own pace and according to their own needs. The term Information and Communication Technology (ICT) evolved from Information Technology (IT). Whereas Information Technology is used to refer to the latest trend and devices that enhance information processing and usage, ICT on the other hand is used to represent the process or act of exchanging or sharing information using the existing technological facilities such as computer related devices, Barcode machine, Networks, Internet connectivity, electronic mails scanner, printer, CD ROM, facsimile and storage devices.

Information knowledge in library has to do with acquisition, dispensing, storage and distribution of information. In other words, it is broad-based term comprising acquisition organization, storage and distribution of information that can be in textual or statistical (books, papers), vocal and instructive forms audio-visual or a syndicate of all the above (multimedia) by means of a mixture of processor and telecommunications plans. Oni (2004) is of the view that information equipment includes every electronic infrastructures and facilities used by librarians to advance and give competent services to clientele. Such services consist of hardware, software, connections the services outlets of one library and comparable outlets of a diverse library. Also, sees information knowledge as the term used to cover the variety of processor and telecommunication technologies concerned in the transfers and dispensation of information. Connecting the computers jointly via the internet has resulted in an upsurge of the amount of information being manipulated every day.

Nowadays, almost every society depends on information expertise. Information has become significant element of our lives and should be accessible when desired. Information services are generated by means of new techniques to facilitate the right to information. The development of information technology in the libraries has given birth to new forms of library services in other for clients' to get contentment. Electronic library service has emerged after the introduction of IT in the library and information centers. Information technology has successfully

transformed the individuality of information services being generated in libraries. The past two decades have seen immense transformation in library due to ICT. The technological expansion has made tremendous impact on the growth of knowledge and unlocking of human talent possible. In libraries, the impact is clearly visible in information resources, services, and people. In another development. Nwachukwu (2005) defines ICT as a device or tool that allows for the collection, storage, processing or the communication of information. It is a kit or equipment used for capturing, processing, storing and accessing information. (Ekoja, 2007). ICT devices which are used to acquire or impart information or knowledge are seemingly endless. They include calculators, photocopiers, computer related devices, Barcode machine, Networks, Internet connectivity, electronic mails scanner, printer, CD ROM, facsimile and storage devices. Although ICT devices are many, for this project work, the emphasis is on computer related ICT devices. The benefits of ICT in libraries generally and university libraries in particular are innumerable.

The Federal Ministry of Education embarked on the establishment of the National Virtual (Digital) Library Project, to improve access to national and international library and information centers and to distribute locally accessible resources with libraries all over the globe by means of digital machinery among other objectives. A model of Virtual (Digital) Library at the National Universities Commission (NUC) will be the laboratory of the university-based libraries. Stated that computing machinery, communication technology, and mass storage technology are some of the areas of incessant expansion that redesign the way, libraries access, recover, store, control, and distribute information to users. ICT has impacted on every area of library movement; particularly in the structure of the library, gathering, increase strategies, library building and consortia. ICT presents an occasion to offer value-added information services and access to diversity of digital-based information materials to their clients. In addition, libraries are also using ICTs to mechanize their center functions, implement competent and effectual library collaboration and resource sharing networks, put into practice management information systems, expand institutional repositories of digital local contents, and digital libraries and start ICT based potential structure programmes for library clients. Information and Communication Technology (ICT) has brought extraordinary transformation and change to university library and information services. Information skill has been variously researched by various scholars. Thus, Information Technology is concerned with acquirement, dispensation, storage and distribution of information-textual, arithmetical, symbolic and vocal. In other words, it is measured as a broad term comprising the acquisition, organization, storage and retrieval of information that can be in textual or numerical (books, documents), vocal and pictorial forms (audio-visual) or a combination of all the above (multimedia), using a combination of computer and telecommunications devices. Management of knowledge symbolizes intellectual pillar on which the practice of the library profession rests. They represent the systematic base for the librarian's claim to professionalism. Use of information communication technology in library activities in the academic libraries raises the question of the depth of management of information. Availability of ICT amenities and peripherals have the impact of tumbling detachment, mounting the volume and extent of information that can be handled within a given time and escalating the simplicity of probing by

clientele. Observed that the application of technology for library and information services delivery have undergone different kinds of growth. An automated cataloguing, circulation and acquisition systems have led to better management of library activities and improved services. Today, ICT is providing libraries with dominant new tools to meet their patrons' information needs within their traditional printed resources.

Edoka (2000) summarized some functions of the university libraries where the application of ICTs is imperative for better accomplishment. They are as follows:

- i. To provide information materials required for the academic programme of the parent institution
- ii. To provide research information resources in consonance with the needs of faculty and research students
- iii. To provide information resources for recreation and for personal self-development of users.
- iv. To cooperate with other libraries at appropriate level for improved information services.
- v. To provide specialized information services to appropriate segments of the wide community

With internet connectivity, university libraries can reach beyond their walls to provide patrons with resources available in their libraries. Social media as typified in library 2.0 model are increasingly appropriate part of libraries and they are tools for enhancing library facilities and knowledge. Numerous libraries are successfully using twitter to commune services like opening times, new arrivals etc., while others have developed applications that enable users to search catalogs from within Facebook. There is no doubt that the application of ICTs have provided one of the best innovations in the history of libraries and it is transforming the shape of libraries and role of librarians at an extraordinary shape. Computer technology, communication technology, and accumulation storage technology are some of the areas that redesign the way libraries access, recover, store, control, and circulate information to patrons.

ICT has impacted every area of academic library services particularly in the form of, library structure and consortium. ICT has brought unprecedented changes and transformation to academic library and information services. Conventional OPAC, user services, reference service, bibliographic services, current awareness services, document delivery, interlibrary loan, audiovisual services, and customer relations can be provided more professionally and successfully by means of ICT. This is because they offer suitable time, place, cost efficacy, quicker and most recent distribution and end users involved in the library and information routine process. Nwalo (2000) lists some of the benefits of ICT to libraries as: being able to automate technical services; to provide efficient references and information services; to network operations such as cataloguing, authority control, interlibrary loans and International bibliographic project. These functions become faster and less cumbersome to perform with the help of ICT facilities. Ajayi (2001)

describes a library transformed into a new information service unit, providing electronic cataloging, On-line Public Access Catalogue (OPAC), electronic acquisition and serials control, electronic inter-library loan and electronic circulation functions. The University library which has long been recognized as the heart of every academic institution is one place where the benefits of ICT are prodigious. As the center of intellectual activities of the university, it has an important role to play to make sure adequate information materials are provided and that adequate assistance is given by the library staff to ensure that the information needs of the staff, students and researchers of the university are met. Modern ICT facilities such as internet, can enable the university library provide content and information dissemination by means such as electronic thesis and dissertations, which students and researchers can benefit from millions of pages of relevant information on the web.

The impact of ICT has characterized information services by transforming arrangement, substance and technique of construction, and delivery of information products

Impact of Information Technology on Library Services

Discusses the impact of information technology on library services which has been labeled communication technologies are the nervous system of modern society by transmitting and distributing, control information and interconnecting a library of interdependent units. Information technologies are equal to communications technologies since the two are interchangeable. Both deal with the use of microelectronic based equipment, like computer, telephones etc. (hardware) to acquire organize, store and circulate information (software). Therefore the meeting of telecommunications and computing of information has resulted in what has come to be identified as new information and communication technology (ICT). There is no gainsaying that the impact of information skill on library services has contributed a great deal to the growth of a lot of organizations and also the nation. According to Aliyu (2005), users in particular have a wider choice regarding the way they equip themselves than they once did. According to him, process in information technology and library services is rapidly changing. Apart from computers, other related information technologies used in library services include CD-ROM, Fax, internet and assorted audio-visuials. Believes that the impact and significance of information technology on library services cannot be overemphasized. From time immemorial, information has been one of man's priceless commodity.

In reviewing the impact that information technology has had on library services opined that the advanced countries of the globe are heading in the way right now there users will not come to the library. The library will be accessible to them through terminals in their own homes or offices. He added that schools of library and information science in the United States of America have well equipped, well-stocked computer laboratories due to the support of many loyal Alumni and others. But some of the basic equipment's are purchased by government. Each faculty member he further stressed has a personal computer on his desk and new students who are admitted into library schools come in knowing the basic microcomputer use. They can manipulate a database and can use their own terminologies. This they do in a variety of ways and so reorganize the data-

base to meet their own perception and needs, which is a whole new way of learning and interacting with information itself. Notably, information and communication technology as an electronic means of capturing, processing, storing and disseminating has brought many revolutions in human life. One very important impressive and effective revolution is the enhancement in the speed and span of information production, sharing, and recycling. It has changed the basic concept of proprietorship into sharing and preservation into access. Library science is among the fields which have been influenced by this revolution of a great change.

Problems Militating against the Use of Information Technology on Library Services.

The implementation or use of information technology in library services is not without some problems it has been observed that the major problem is the general dearth of competent manpower to handle all aspects of automation and with the background to assume the function of system analysis. There is the possibility of occasional machine malfunction which may take long time to repair due to inadequate professional technicians.

Therefore, the issue of technical know-how is a paramount problem which could hinder the success of the whole process. funding is the major constraint of information technology in library services and that it is more than just acquiring the hardware and software but updating and maintenance is very crucial in order to sustain it. Infrastructures, like effective air conditioning system is also a high cost implicating risk which is very essential in a mechanical library or office. The main problems that can face library as they become increasingly concerned with the use of information technologies in library services are as follow:-

- General inadequacy in the level of relevant infrastructures, particularly telecommunication facilities and power supply.
- A largely unfair local processor market and unacceptable after sales preservation and support.
- Insufficient collection of related technological personnel and troubles of their conscription and preservation.
- Users conflict in accepting the application of online information.
- Database renovation problems.
- Recurrent transformation in technologies. Also, [2] observed the following as problems militating against the effective use of information technology in libraries.
- Lack of rule or principles of ICT education/training programmes.
- Insufficient power supply. • Inappropriate preparation for ICT facilities in libraries.
- Lack of maintenance of ICT facilities in libraries. • Lack of ICT skills on the part of library personnel.
- Acquirement of outdated ICT amenities in libraries.
- Patrons not capable to apply ICT skill in libraries.
- Lack of automation in some areas of library.

Although many libraries in Nigeria are trying to become ICT acquiescent, they face a number of difficulties which include scarce finance, technological skills, unreliable electricity power supply, unexcited feelings of clients, political unsteadiness, environmental separation, insufficient infrastructure. It is has been observed that the application of current information technologies to libraries activities and services in Nigeria higher institutions seems insufficient probably due to a diversity of factors. Only few library practitioners also believe that there are many benefits that can be derived from the use of IT, thus giving preferences for manual library operations. Those who are aware of its benefits are afraid of being eliminated from their jobs even though they know that its application to library routines such as administration, acquisitions, cataloguing, and classification, circulation, information retrieval and serials control would facilitate effective and efficient job performance. Growth in ICT has made substantial impact on all area of human services and activities such as banking, health, transportation, education and libraries. For the libraries, ICTs has especially transformed the organization of databases and including the ways services are rendered. Information communication technology has brought unexpected transformation and modernization to academic library and information services. Patron's services such as online public Access Catalogue (OPAC), reference services, audio visual services and patron relationships can be provided more competently and successfully by means of ICT. The services rendered with the help of ICT are more expensive. The use of ICT in the library simply mean, carrying out the physical services in networking. This makes it simple for the management of information production and diffusion in the libraries the growth in information communication technology has reshaped the way libraries access, recover, store, control and broadcast information to their potentials patrons.

Computers, CD-ROMS, internet, electronic mail, online information etc. assist library functions such as expansion, management and organization, col- lection growth, serials organization, bibliographic anthology, inter library loan.

CONCLUSION

Significant of ICT in libraries cannot be ignored. ICT is immensely used in the libraries studied and it is something inevitable for the present day libraries, if librarians are to function well and carry out their duties in this 21st century. They must be skillful so as to cope with acquisition and information in the library. Librarians need to be up and doing with emerging trends in information technology. Effort should be made on the part of librarians to acquire all it takes to function well as professionals in this digital age: the cost and stress involved in acquiring these skills notwithstanding.

RECOMMENDATIONS

- ❖ There should be adequate provision for training and retraining in ICT skills for librarians to enable them fit into digital age.
- ❖ Funds should be provided by the financiers of the library for the procurement of ICT facilities.
- ❖ Good internet services should be provided without interruption of any kind as this will boost the efficiency of librarians in meeting the information needs of their users.

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