Use of Information and Communication Technology in Library Services, Impact and Challenges

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Abstract
ICT has impacted greatly all sector of the economy and brought about modern and improved ways of doing things as oppose to the traditional way. Today, ICT becomes a driving force in the libraries. The use of ICTs in the libraries has tremendously changed the management of resources or housekeeping operations as well as the way services are delivered. that for any library to achieve its objectives, library services should be put in place so that user’s need could be met and for user to achieve maximum satisfaction It provide a platform whereby librarians can generate, store, retrieve, preserve and transmit information The provision of library services is the fundamental human right and as such libraries should provide an effective and efficient services that is accessible to everybody. This paper addresses the application of ICT in library services, discusses the benefits if library services to the users, impact of ICT, the resources for ICT application and the challenges of integrating it in library services.

Keyword: Information and Communication Technology, Library, Library services, Information provision, ICT resources.

Introduction
In this 21st century, the world has become a global village where the populace need to access timely information without investing much energy in their various field of endeavour. The provision of library and information services is the fundamental human right of all
citizens and as such libraries should provide a unique service that should be accessible to everybody. Libraries are playing a very important role in facilitating access to global information and knowledge resources, using ICT. The drastic role of ICT in library operations cannot be over emphasized. The process of generating and distributing information is now being facilitated through the use of ICT. The emergence of ICT has impacted greatly on the quality of information provided by libraries. It also enables proper and adequate provision of library services to library users from all disciplines. Many library routines and operations that were initially performed manually are now being converted to computerized operations which means, applications of ICT techniques to providing better and faster services to the end users. (Lancaster & Sandore, 2001) Aina, Okunnu and Dapo-Asaju (2014) postulated that ICT is a term used to describe the ability to access information with the use of telecommunication based internet resources. ICT provides the ability to create, organize, manipulate and access information from remote locations across the globe, within a short time. ICT involves incorporation of a range of technologies that are used to support communication and information dissemination. Modern ICTs are a game changer in the library and information environment and it calls for librarians to reassess and redefine their roles and approaches to information service delivery to meet the users’ information demands at anytime, anyplace and anywhere. Although, many libraries face diverse challenges in the process of integrating ICTs to their services. Nevertheless, information provision is paramount to every library therefore; effort should be made to enable usability of ICTs in all library service by integrating new ICT skills, suitable basic ICT knowledge and training skills which will help to fuse ICT skills and competence in areas such as Web Wide Web (Ameen, 2010).

CONCEPT OF ICT
Information and communications technology or information and communication technology (ICT), is often used as an extended synonym for information technology (IT), but is a more specific term that stresses the role of unified communications and the integration of telecommunication (telephone lines and wireless signals), computers as well as necessary software middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information.
In a related development, UNESCO (2002) asserted that ICT is regarded as the combination of ‘Informatics technology’ with other related technology, specifically communication technology. Mikre, (2011) refers to ICT as “the computer and internet connections used to handle and communicate information for learning process.

The term ICT is now also used to refer to the convergence of audio-visual and telephone networks with computer networks through a single cabling or link system. There are large economic incentives (huge cost savings due to elimination of the telephone network) to merge the audio-visual, building 98 management and telephone network with the computer network system using a single unified system of cabling, signal distribution and management. ICT is an acronym that stands for Information Communications Technology. There is not a universally accepted definition of ICT, because the concepts, methods and applications involved in ICT are constantly evolving on an almost daily basis. It is difficult to keep up with the changes - they happen so fast.

Ayodele (2002) defined ICT as an electronic based technology generally used to retrieve, store, process and package information as well as provide access to knowledge. Yekini and Lawal (2012) in Yekini (2014) sees ICT as “a powerful collection of elements which include computer hardware, software, telecom networks, workstations, robotics and smart chips, which is also at the root of information systems.

Information and Communication Technology is a term currently used to denote a wide range of services, applications and technologies using various type of equipment and software often running over telecom networks (Dania and Enakrere, 2012). ICTs include well known telecom services such telephone and fax. Telecom services used together with hardware and software from the basis of a range of other service, including Email, the transfer of files from one computer to another, and in particular, the internet which potentially allows all computers to be connected, thereby giving access to source of knowledge and information stored on computer worldwide (Mills and Tincher, 2003). It application includes: video conferencing, telex-working, distance learning, management information system, and store taking. Technologies can be said to include a broad array ranging from “old” technologies such as radio and television to “new” ones such as cellular mobiles.

**CONCEPT OF LIBRARY SERVICES**
Library services are assistance rendered by librarians to their customers so as to encourage and satisfy their research needs (Tunde, 2012). James (2008) defined library services as varied activities that is rendered to library users for effective and efficient patronage and given the required information for research work. Akintunde (2004) opined that library services in many tertiary institutions have either earned the institution accreditation or failed them in the provision of effective and efficient services for academic excellence. Kumar (2009) stated that library services is that phase of work that help users in securing information and assisting users to get what they want or need in the library. In another development, Jones (2010) observed that library services are the assistance and guidance given to library users in securing relevant information for their research work. Okoro (2010) stressed that library services refer to the totality of services of repertoire of services being provided by the library to meet the user’s information needs. This are usually divided into:

- In-house services meant for internal servicing of the library. These include selection, acquisition, organization, preservation etc
- User services: These are services meant for the users of the library. These services include lending, inter-library loan. Document delivery, reserve, reference, current awareness, display and exhibition etc.

Ahmed (2013) stipulated that library services are categorized into two namely; solicited and unsolicited library services. Solicited library services are those services that are mandatory and compulsory for any library to provide for its users. Services such as reference services, bibliographic services, current awareness services, reader services, information services, bindery services, indexing and abstracting services, document delivery services, inter library loan services, internet services, lending services, online public access catalogue (OPAC), photocopying services, research advisory services, referrer services etc. Unsolicited library services are those services that are not mandatory and compulsory for library to provide to its users but they add more value to the mandatory library services. These services include; Book talk, Display and Exhibition, TV show and radio services, Teleconferencing, Extension services such as film show, puppet shows, picture book time, and story-telling. Idowu (2011) enumerated the following services rendered as part of what library staff provide and perform to satisfy users need; reference, document delivery, charging and discharging, current awareness, counseling, research advisory, bindery, reprographic, inter-library loan, indexing and abstracting, photocopying, computerized interactive search, display and exhibition, bibliographic and reader services.
The services rendered in a library differ from one library to another, depending on the type of library, the type of patrons and the parent body’s objectives. Other library services as highlighted by Idowu (2011) include:

- Reference Service
- Current Awareness Services (CAS)
- Selective Dissemination of Information (SDI)
- Reprographic Service
- Exhibition and Display
- Technical Services
- Serials Control
- Computerized Interactive Search

**BENEFITS OF LIBRARY SERVICES TO USERS**

Ahmed (2013) stated that for any library to achieve its objectives, library services should be put in place so that user’s need could be met and for user to achieve maximum satisfaction. The benefits of Library Services are:

- It exposes users to different kinds of information and information resources.
- Good library services promotes and enhance good library patronage
- Library services can boost the image of the library
- Library services promotes the use of the library
- Good library Services enhances the learning process among users.

Andrew (2011) observed that the contributions of library services to education in the new millennium would be appreciated more when one recognizes the fact that, library is an important resource center for up-dating knowledge; it houses journals, newspapers, textbooks and other information resources which reflect changes that take place from time to time in knowledge. So to keep tract with these changes, it is essential to consult library materials.

In a related development, Johnson (2011) noted that the importance of library services to education can also not be over emphasized especially when one recognizes the facts that not all works needed for private and group studies can easily be acquired individually because books, dissertations and many unpublished special works are scares and hard to come by. Some of them are out of circulation after having ceased publication. Private ownership of some library books is further inhibited by their price. Works such as encyclopedia are very expensive. It is therefore, natural that only very few people can afford copies or sets. Libraries make provision for acquisition of rare books, printed and non-printed materials including costly and many useful work that an individual cannot acquire by making them available for free use to those in need of them. It is also part of the functions of the library to help readers to obtain
loan from other libraries, books not readily in its collections if such books are highly needed. So library does not only serve as place where all types of books and documents are stored for use, but it also offers inter-library assistance to readers.

**IMPACT OF ICT AND ICT RESOURCES FOR EFFECTIVE LIBRARY SERVICE DELIVERY**

The advent of ICT is indeed a boost to the library services as it now assists many librarians to use their ICT potentials to reach out to library users. It foster retrieval of stored information and reform our traditional library to a modern library and help in the provision of value added services to its users. Chisenga (2004) identified some of the ICT-based services that are provided by libraries as follows:

- Provision of web access to OPAC: Libraries are providing access to web-based Online Public Access Catalogue (OPAC) interfaces. The OPAC makes it easier for users to access and use information resources. OPAC is the computer form of library catalogue, to access materials in the library (Afolabi and Abidoye, 2012)

- Electronic Document Delivery: Libraries implement ICT-based interlibrary lending system, through the use of electronic networks for documents delivery. In essence, the Document Delivery Service (DDS) enables a library to use copies of research papers or other research document, from other libraries. These documents could be journal articles or other documents in digital format. They are mainly in portable document format (PDF) and they delivered to library users’ desktops.

- Online Instruction/User Education: There is implementation of online based bibliographic or library user programmes such as online tutorials on searching online resources and virtual tours of library collections. Libraries can also use internet or CD-Roms to educate users.

- Online Readers Advisory Services: Libraries now implement web-based versions of reader’s advisory services to include informing users about new acquisitions, provide reviews and recommendations and so on in using the web.

- Networked Information Resources: Libraries now provide users with access to networked information such as database, electronic scholarly journals and other publications from various publishers. • Borrowing, Renewing and Reserving Reprographic Technology: These are widely used in libraries globally. Reprographic machines are provided in libraries to ease photocopying of documents on demand.

- Library Retrieval System: This involves the use of compact disc read only memory (CDROM), a technological mechanism for acquisition of
specialized CD-ROM databases in various discipline such as law, sciences, medicine technology, agriculture, humanities and so on. Indexing and Abstracting Services: It is a service that is carried out to provide summaries of documents and also to assign descriptors for referencing documents.

- Institutional Repositories: It is an online archive for collection, preservation and dissemination of digital copies of the intellectual output of academic or research of institution, this could be journal articles as well as digital versions of theses and dissertations. This service is mostly provided in academic or research libraries.

- Document Scanning Services: Scanner is important equipment in modernization of library. It is useful for scanning text, image and content page of books and providing great help for establishing digital and virtual library.

Nwabueze and Ozioko, (2011); Umana (2018) identified the following ICT resources as paramount to effective delivery of library services. The ICT resources include:

1) Computers: These are essential management tools which can be used to handle different operations more efficiently. Computers can be used for various activities such as information generation, processing, storage, analyzing and information dissemination for sustainable development. The use of computers in the library is noted with great assets such as speedy information transmission, cost effectiveness and optimal utilization of available resources. Other computer accessories include CDs, Flash drive and so on. The computers are used to perform various library operations and routine such as ordering/acquisition, circulation e.t.c.

2) The Internet: This ICT resources is a means to speedy flow of information. It is a network of computers, communicating with others, often via telephone line. The internet provides a worldwide platform for information sharing among individuals, institutions and organizations. The use of internet enables the provision of current and useful information to enhance productivity and good governance.

3) Electronic Mail (E-mail): This is the most widely used resource of the internet. It is used for sending and receiving of messages otherwise known as mails. The messages are communicated through electronic device. E-mail enables faster and cheaper organizational communication.

4) World Wide Web (WWW): This is also an internet- based resource. Websites help individuals, organizations or institutions find products or
information and transacts business. Relevant information is made available to members of the public through the websites of many organizations or institutions. Being on the web, places any nation or organization on the right cause of speedy and sustainable development in line with emergence of changes in technology, economic and political area.

5) Video Conferencing: This enables people at different locations to hold conferences by data communication network. It is convenient and less expensive for conducting a conference between two or more participants situated at different remote location (Mishra and Mishra, 2014).

6) Printing Technology: A printer is a device that converts computer output into printed images. There are different kinds of printers used in library. They include Laser printer, Inkjet Dot-matrix printer and so on.

7) Online Public Access Catalogue (OPAC): It is the computer form of library catalogue to access information materials in the library. It is an online database of materials held by a library or group of libraries. It is a computerized library catalogue made available to the public. Most OPACs are accessible over the internet to users all over the world (Mishra and Mishra, 2014).

CHALLENGES OF INTEGRATING ICT IN LIBRARY SERVICES

Despite the mouthwatering benefits associated with the use of ICT in libraries and information centers in Nigeria, there appears to be some challenges that seem to restrain librarians from fully utilizing and applying ICT in library operations and services, some of the challenges include; According to Afolabi and Abidoye (2012).

- **Poor infrastructural facilities:** The problems of poor infrastructural facilities especially erratic power supply have been the major cause of setback in the integration of ICT in library services. Government should therefore provide enabling environment that will allow donoagencies to provide investors particularly those in the information sector to take full advantage of recent advances in information technology to bring out libraries up to date. In this regards, effort should be made to make the Nigerian technology limited and power holding services more efficient than what is currently obtained.

- **Cost:** Despite that ICT are applicable to library services, high cost of ICT equipment could not make it to be widely utilized by most libraries. Adedoye , Adererele and Adelokun (2010) stress that most
library users and librarians could not afford the cost of common personal computer.

- **Poor Maintenance of ICT equipment:** Most libraries lack conducive environment for keeping and effective functioning of ICT equipment. Besides, most of the ICT equipment are poorly managed by most libraries. In addition, the costs of maintaining ICT equipment’s are very high.

- **Frequent Change in Technology which might lead to total Overhauling of the existing system:** Frequent changes in software upgrading leads to total overhauling of the existing system as we have in some academic libraries in Nigeria.

- **Lack of Sufficient monetary allocation/ Poor funding:** Most libraries do not allocate sufficient money to the building of ICT infrastructure.

- **Lack of ICT policies:** There is lack of systematic ICT policies in most libraries in developing countries which impedes the deployment of ICTs.

- **Inadequate Technical/Skilled Manpower:** There are dearths of technical manpower in the area of ICT in Nigeria. Faulty equipment is abandoned in some libraries because there is no knowledgeable staff to repair them.

- **Erratic Power Supply:** ICT infrastructures depend mostly on electricity to function and access the needed information.

- **Technophobia:** The use of ICTs is easier for younger librarians. Several studies, according to Ezeani have shown that older librarians find it difficult to use some of these newer technologies.

**CONCLUSION**

Library and information centres have embraced the ICT more profoundly than any other fields. The advent of ICT is indeed a boost to the library services as it now assists many librarians to use their ICT potentials to reach out to library users. ICT presents an opportunity to provide value-added information services and access to a wide variety of digital based information resources to their clients and provide faster, timely and up to date information to their users.
REFERENCES


