

CHAPTER NINE

INFORMATION AND COMMUNICATION TECHNOLOGY AS A CORRELATE OF LIBRARY AND INFORMATION SERVICES IN TERTIARY INSTITUTIONS IN AKWA IBOM STATE

AKPAN, E. Ebenezer, *Ph.D, FCICN, AP, PPGDCA, PHDCDPM*
Corporate Institute of Research and Computer Science
140 Ikot Ekpene Road
Uyo, Akwa Ibom State

AND

EKONG, Xavier Moses, *Ph.D*
Department of Educational Technology and Library Science
University of Uyo, Uyo

ABSTRACT

This paper is an attempt to explore ICT as a correlate of library and information services in tertiary institutions in Akwa Ibom State. It has been literally noted that ICT has impacted greatly on the quality of information provided through libraries. Despite the availability of wide opportunities offered by the advent of ICT, it has been observed that the application of ICT to library services in Nigeria seems inadequate, probably due to a variety of challenges. With the methodology of a simple literature review, the paper made an effort to review related literature on ICT resources and ICT-based services in libraries, the concept of the library, types of library services, and the roles of ICT in libraries and information services. The paper further identified the challenges of ICT related problems in library services. It was summarized that ICT is not simply a technology; it also helps libraries achieve their goals. By using ICT, libraries may adapt to new and current information approaches. It was recommended, among others, that library authorities increase budgetary allocation to libraries to enhance smooth maintenance and management of ICT facilities in the library.

KEYWORDS: Information and Communication Technology, Library and Information Services, Tertiary Institutions and Akwa Ibom State

INTRODUCTION

Information and communication technology (ICT) has been a driving force behind national progress and development. Information, like power, is a virtually limitless resource and a critical instrument for the growth of all sectors in any country. As a result, it is critical that the applications in libraries go a long way towards satisfying the information needs of citizens. It's worth noting that the rise of ICT has impacted greatly on the quality of information provided through libraries. It also enables proper and adequate provision of library services to library users from all disciplines. In this 21st century, the drastic role of ICT in library operations cannot be overemphasized. Many manual library procedures and activities are now being transformed into

computerized processes, which means that ICT methods are being used to provide better and quicker services to end users. A nation without functional libraries and information centres may lack access to information that would enable its sustainable development. In this era of globalization, in which the world is connected, information gains its power through permanent storage and wide distribution, which could be achieved through ICT. According to Janakiraman & Subramaniam (2015), the world is now experiencing a digital scenario in which ICT has changed the possibilities of library job promotions and has brought changes to expected library performances. The use of ICT improves access to digital information, narrows the digital divide and also improves the standard of living. Adoption of ICT in libraries is a way of improving on information services provided in libraries. It is also a method of contributing to the nation's long-term development, as timely and effective dissemination of important knowledge may aid in the growth of a society. ICT as an enabling instrument, aids libraries in the supply of information, which is critical to the growth of the country's many sectors (Raji, 2018). Thus, ICT is not simply a technology; it also helps libraries achieve their goals. By using ICT, libraries may adapt to new and current information approaches.

CONCEPT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

The phrase "information technology" refers to a wide variety of hardware and software. Information is processed, stored, and/or transferred (communicated) by an information technology (IT) system. IT combines computation with high-speed data, sound, and video transmission channels. Examples include personal computers, telephones, television, and various handheld devices. Therefore, computers and communications are the pivots of Information Technology (IT) (Williams & Sawyer, 2005). Information Technology (IT) systems employ computers, telecommunications networks, and other electronic devices to transport data. As a result, adding the term "communication" is unavoidable. As a result, Information and Communication Technology (ICT) exists (ICT). When information and communication drift away from the orthodox verbal and print media towards the more recent electronic media, the concept is known as "Information and Communication Technology (ICT)." Thus, ICT is a broad word that encompasses the technologies that are used to gather, store, modify, and convey data in a variety of formats (Raji, 2018). According to Ezekoka (2015), ICT may alternatively be defined as a set of networks, hardware, and software, as well as communication, collaboration, and engagement tools that allow for the processing, management, and sharing of data, information, and knowledge. Aina, Okunnu & 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. Saidu, Tukur & Adamu (2014) described ICT as the use of computer-based technology and the internet to make information and communication services available to a wide range of users. ICT provides the ability to create, organize, manipulate and access information from remote locations across the globe, within a short time. ICT involves the incorporation of a range of technologies that are used to support communication and information dissemination (Aina et. al., 2014; Saidu et. al., 2014).

CONCEPT OF LIBRARY

Libraries have been around for a very long time and are traditionally seen as collections of information and services. Libraries have long played an important role in allowing individuals to access a wide range of information and knowledge resources

(Curran et al., 2006). Francis, Estabrook, Foskett & Haider (2017) explain that the library has its origins in the Latin word "liber", which means "book". From this standpoint, it infers that a book is inseparable from the concept of a library. The conservative definition of a library as a storehouse of knowledge where resources are shackled to preserve and prevent them from any form of theft, making access to them very narrow, is no longer adequate. However, by the middle of the 15th century, with the invention of the printing press, several copies of a book could be printed within a short time. With the availability of the printing press, it became easier to replace lost copies, print more copies, and reprint damaged books. From this period onward, the orientation of the library changed from a preservation centre to a free-access centre (Uzoigwe, 2017). The invention of the printing press invariably revolutionised the concept of the library. Hence, the library can be described as an organized collection of books and other information materials kept for reading, study and reference. Achebe (2008) defines a library as a collection of books and other non-book materials, housed, organised, and interpreted to meet the yearning needs of people for information, knowledge, recreation, aesthetics, research, and enjoyment. FRN (2004) sees the library as the pivot of the educational enterprise, which gives the platform for the sharing of knowledge aimed at rejuvenating Nigerian schools through the provision of current books and journals. All of these definitions agree on one thing: a library is an organized collection of books and other non-book materials stored for use by library patrons.

TYPES OF LIBRARY SERVICES

Library services bring together documents or information sources and their users through the personal efforts of the library staff. Libraries provide a variety of library and information services to satisfy different information requirements of users. Patel (2015) identifies the following library services as:

Reference Service: Reference services help users to locate and obtain specific pieces of information from information sources such as reference books, catalogues, directories, files, abstracting and indexing periodicals, databases (online and CD-ROM) and other reference materials. Library personnel may either help users in searching (direct search) or they themselves do the search for users (delegated search) in online or offline mode. Reference service is subjective because of its stress on personalized service. Instruction has objective connotations because it encourages the user to do independent study.

Referral Service: Referral services aim to refer users to the sources of information such as secondary publications, information units, professional organizations, research institutions and specialists/experts. Such services do not provide the documents or information required by the user for his or her query, but give direction where available. Librarians utilize directories and databases of sources, specially designed and developed for the purpose of rendering referral services.

Selective Dissemination of Information (SDI) Service: SDI is a special type of current awareness service. It provides each user with references to documents related to their predefined areas of interest, selected from documents published recently or received during a particular span of time. In the 1950s, H. P. Luhn first coined the concept of SDI as a computer-mediated information service. The workflow of SDI service is based on the following steps:

- i. Create users' profiles.
- ii. Create a document profile.
- iii. Matching the user's profile and document profile.
- iv. Give the notification to users.
- v. Take feedback from the users.

Current Awareness Service (CAS): CAS satisfies users' current approach to information and thereby keeps them up-to-date in the field of their work (Tella, 2020). The important characteristics of CAS are as under:

- i. It is a technique of communicating current information to users.
- ii. It provides the latest developments in a subject field and does not provide an answer to any specific query.
- iii. Generally covers a broad subject area and supplements the user's own channel/media of obtaining information.
- iv. It is known for its speed and timeliness.
- v. It is meant for use before its contents are absorbed by secondary publications like abstracting and indexing journals.

CAS can be delivered through a variety of media and channels, including current awareness lists, current content, periodical routing, a list of ongoing research and upcoming meetings/seminars/conferences, newspaper clippings, and so on.

Document Delivery Service (DDS): Document delivery is a key element in access to information. Unless the documents required by the user are available to him/her, all the other services are of no use. DDS is a complex process and is concerned with the supply of documents to users on demand in the required format. DDS is the last point in this chain of information services that actually locates the required document and supplies it to users in the required format. Electronic DDS supports delivery of documents in digitized form at anytime from anywhere.

Translation Service: In the area of science and technology, about half of the world's literature is published in languages other than English. Access to non-English literature by people who know English is possible through translations. Translation services thus help in the global access of information.

ICT Base Library Services: Information Communication Technology (ICT) has had a significant impact on all spheres of human life. For libraries, ICT has tremendously changed the management of resources or housekeeping operations, as well as the way services are delivered. IT application tools and Integrated Library Management Systems are largely used in housekeeping operations, like acquisition, cataloguing, circulation control, serial control, etc. In the library, the Internet has been used extensively as a resource as well as a tool to deliver library and information services. The library provides the following ICT base service to its users (Patel, 2015).

ICT'S ROLE IN LIBRARY AND INFORMATION SERVICES

Globalization driven by ICT is currently having a phenomenal impact on library practices. ICTs are significant and useful tools for sustainable development in all fields and all aspects of our society. ICTs provide a means of actualizing developmental goals in education, health, agriculture, business and commerce, among others. According to Olise (2010), the use of ICTs in education has resulted in the computerization of conventional library items such as books, journals, newspapers, and other sources of knowledge. As a result, a virtual library has been created. Educational scholars can easily obtain current literature materials by utilizing ICT. ICTs also motivate scholars to collaborate regardless of their geographical location. Likewise, Khiste, Maske & Veer (2011) noted that ICT has affected and impacted library services in many ways, including:

Collection Development: ICT has made it possible to acquire information sources such as books, journals, newspapers, etc. easily and speedily. Most publishers have their own websites on the internet, and their websites can be searched from the library for new publications. Librarians can place their orders online and clarify doubts, if any, through e-mail easily. Some of the reputed publishers also provide online access to their publications.

Circulation: Due to new technology, users can easily check their documents. If the documents are available, the same can be issued to users. If not available, then it may be reserved. The document can be issued electronically by making use of barcode strips pasted externally on the documents.

Reference and Information Services: The reference section is the backbone of any library. A well-organized library will always provide reference service with prompt and accuracy. The internet also has a large number of primary and secondary information sources that can be used to provide information to users.

Resource Sharing: Due to the increasing cost of the documents and the non-availability of enough funds, libraries are unable to provide each and every one of them to their users. But the ICT library solved this problem. The user himself/herself can search the OPAC of other libraries or he/she may ask the librarian to provide the desired document. Once he/she is able to search it, he/she can request that library to give the document on inter-library loan.

E-Journals: Because of modern technology, a library can provide current information within a short period of time, as it is easier to update the issue of a journal on the internet as soon as it is published.

Periodical Control: Electronic mail is becoming the most useful means of communication. This service can be used to send and receive messages easily and speedily.

CHALLENGES AND ICT-RELATED PROBLEMS IN LIBRARY SERVICES

While new technologies have contributed value to library services by introducing new ways to gather, store, retrieve, and provide information, they have also introduced new challenges and exacerbated some of the problems that libraries have encountered in the past. According to Emmanuel and Sife (2008), acquisition of ICTs, preservation of

electronic information resources, maintenance and security concerns, user training, and a general lack of knowledge and commitment among library stakeholders are among the related challenges of ICT to libraries. The use of ICT in library services has raised a number of challenges. These include:

Funds for Acquisition of ICT Facilities and Services: Libraries require sufficient funds to acquire modern ICT facilities such as computers, servers, scanners, photocopiers, software as well as paying for online and offline services such as e-journals and digital libraries. Most of these ICT facilities and services are very expensive and can be purchased from developed countries. On the contrary, experience reveals that most libraries in Africa and other developing countries get very little funding from the library stakeholders and the government for support of their activities (Mutula, 2004). In addition, the little funds received fall far below the standard costs of ICT facilities and services.

Storage and Preservation of Electronic Information Resources: Abstracting and indexing services, full-text materials such as reference books, electronic journals, article delivery services, free Internet resources, CD-ROMs, digital libraries, and other electronic databases are examples of electronic information resources. These electronic information resources can be accessed through electronic networks from intermediary information providers or mounted locally within the institution or within the library (Breaks, 2009). While most electronic information is freely available, electronic information resources for academic purposes need careful selection, acquisition, and arrangement, and they should be made available and maintained in ways that are distinct from traditional print materials. Thus, keeping and handling CD-ROMs, for example, is challenging since they are utilized by people who are not conversant with handling and using such facilities. In addition, conditions such as dust, heat, and dampness have negative effects on CD-ROMs and other ICT facilities. Preservation of electronic resources like electronic journals is even more challenging. So far, no one method has been adopted for preserving such information resources. Most online resources are volatile in the sense that they can be made available today and disappear the next day.

Maintenance and Security Issues: Frequent maintenance of ICT facilities is crucial to the sustainability of any ICT service. It is imperative that there should be qualified technical personnel to manage and maintain the ICT facilities and networks that the library system runs. However, many libraries have inadequate qualified ICT personnel. Most traditional librarians have low ICT skills and sometimes have technology phobias. Some libraries have managed to recruit and train their own ICT experts but failed to retain them. Consequently, many libraries depend on ICT experts from outside.

Information Literacy among Library Users: Library users need both computer and information literacy (IL) skills to effectively use the rapidly growing and changing information resources. However, many library users think that knowing keyboard and mouse operations enables them to effectively utilize electronic information resources. Unfortunately, this is not the case. A person who knows all the computer hardware and software and every keystroke may not be information literate at all. Although there are some overlaps between IL skills and computer literacy skills, these are two different concepts. Computer literacy skills relate to computer hardware and software (keyboard, mouse, printer, file management, word processing, spreadsheets, databases, Internet

etc.), while IL focus on efficient and effective use of information sources to obtain required information. Lack of IL skills has been pointed out as one of the major causes of underutilization of electronic information resources in many African libraries (Dulle and lwehabura, 2004).

SUMMARY

Information communication technology (ICT) is not simply a technology; it also helps libraries achieve their goals. By using ICT, libraries may adapt to new and current information approaches. ICT has greatly affected the information environment. Librarians must have the knowledge, skills, and tools to handle digital information, and that will be the key success factor in enabling the library to perform its role as an information support system for society.

RECOMMENDATIONS

Based on the above review, it is recommended that:

1. Library authorities should increase budgetary allocation to libraries to enhance smooth maintenance and management of ICT facilities in the library.
2. The government of Nigeria should make library and information services a part of national development initiatives and plans.
3. The Nigeria Library Association (NLA) and the National Library of Nigeria (NLN) must encourage and ensure that libraries acquire ICT tools for effective library operations and information dissemination.
4. The library governing council should make a concrete effort to develop a policy that will deliberate on staffing and training for sustainable management and maintenance of ICT services in libraries.

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