CHAPTER ELEVEN

THE ROLES OF INFORMATION AND COMMUNICATION TECHNOLOGY IN EFFECTIVE PROVISION OF LIBRARY SERVICES

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ABSTRACT

The paper assessed the role of Information and Communication Technology in the effective provision of library services. The emergence of ICT is one of the wonderful gifts of modern science and technology which has brought tremendous changes in library and information science. ICT is the combination of information technology and communication technology. ICT has a longstanding influence in almost all areas of human activity, including the library sector. With the influence the roles of ICT have had on library services, it has helped Liberians to work as information brokers, navigators, and information experts. The available information present in the libraries can be fed to the home page and made available to users anywhere. One of the roles ICT has played in the library service is that it is possible to acquire information such as books, journals, newspapers, etc. easily and speedily. It also fosters the communication, management, and marketing skills of the Liberians. The study concluded that Information Communication Technology ICT has been supporting education, research, and development in different ways; it plays an important role as a link between users and librarians. Information and communication technologies (ICT) have had a profound impact on the way information is gathered, stored, organized, accessed, retrieved, and consumed. ICT has helped and supported libraries to overcome the barriers of time and space. Many countries and their university libraries have begun to rely on information and communication technologies (ICT) as a result of electronic information. Inadequate application of ICT to libraries is a challenge facing the effective functioning of library service. One of the recommendations made was that the government should provide constant electricity power supply to libraries in order to ensure the stable use of computers.

KEYWORDS: Roles, ICT, Effective, Provisioning and Library Service

INTRODUCTION

Information communication technology (ICT) is the combination of science and technology and practice of transmitting information. In a specific sense, ICT means communication of information through technology, in which information is transmitted through electronic gadgets and signals. In this process, the information or message, such as spoken words, photographs, live senses, and sounds, is first conveyed into signals and then transmitted through electronic links. In the present age of information expulsion, the growth rate of information and knowledge is faster than before and is

still accelerating. Information is a dynamic and unending resource that affects all disciplines of human life. Hence, it has been supporting education, research and development (Satyanarayana, 2020). The process of ICT involves sending, receiving and processing information in electronic form. ICT permeates the library environment; it underpins the success of the modern era; and it provides colleges with efficient infrastructure libraries, which must be able to benefit from technological development. To be able to do so, libraries have to be educated by hand with an ICT background. ICT plays an important role as a link between users and librarians. It contributes to the sustainable growth of libraries and their role in the shift towards knowledge-based societies (Deshmukh, 2010). Libraries have always been the source of information and knowledge and they have been fulfilling the information needs of the users for centuries in the traditional way. But the last two decades have brought revolutionary changes in the provision of library service. Information and communication technologies (ICT) have had a profound impact on the way information is gathered, stored, organized, accessed, retrieved, and consumed. The application of computers to information has brought about several products and services to the scene (Egberongbe, 2011).

The technology revolution has literally shrunk the whole world into a global village. The libraries are trying to meet the information needs of modern users by making available a wide variety of electronic information resources (EIRs) for their users. EIRs plays a dominant role in each and every field of modern society; hence, they have been treated as a collection of modern technologies, which cover CD-ROM, online and offline databases, videotext/Teletext, motion pictures, e-mail, e-books, e-journals, etc. EIRs offer numerous benefits, including time and place convenience, timeliness, the ability to search directly, link to additional sources, and the ability to disseminate information. The use of EIRs for academic purposes would improve academic efficiency, increase technological skills, and reduce anxiety while conducting research and learning (Nyamboga, et. al., 2014). From the library's point of view, electronic formats offer the convenience of storage, maintenance, and cost advantage. Electronic information has made many countries and their university libraries start functioning using information and communication technologies (Byamugisha, 2010). ICT is the integration of computer and communication technology which is used to select, acquire, process, store, and disseminate information. It has changed the traditional practice of library and information delivery (Ahmad & Fatima, 2009). ICT has helped and supported libraries to overcome the barriers of time and space, and it also reduces the time between the generation of the information and its use. (Walmiki & Ramakrishnegowda, 2009).

CONCEPT OF INFORMATION AND COMMUNICATION TECHNOLOGY

The emergence of ICT is one of the wonderful gifts of modern science and technology which has brought tremendous changes in library and information science. The application of information and communication technology (ICT) to library and information work has revolutionized the traditional concept of libraries from a storehouse of books to an "intellectual information center," connoting the concept of an electronic library. Nwachukwu (2004), information and communication technologies (ICTS) is the application of computers and other technologies to the acquisition, organization, storage, retrieval, and dissemination of information. However, information and communication technologies involve the use of electronic devices such as computers, telephones, and the internet to disseminate information in the form of data, text images, and others. ICT is being increasingly used in library and information

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services for acquisition, processing and dissemination of information. Libraries have been using ICT-based services to satisfy the diverse information needs of their users (LISBDNET WORK 2014). The use of ICT has become increasingly important in special libraries as it is switching over to ICT based as it is switching at an accelerated pace. The use of computers for library operations gives jobs and saves a considerable amount of time, resources, and labor. It also speeds up technical processing and information services. This role is enormous and global in its magnitude, pervasiveness, and usefulness. Because of a dramatic decrease in cost, size, and a tremendous increase in processing speed, storage, and communication capabilities, ICT has had a profound effect on the progress and development of library services.

The tools used in ICT include computer programmers, databases, communication networks, analysis and design methods, programming languages, artificial intelligence, knowledge bases, etc. ICT has a longstanding influence in almost all areas of human activity. ICT is the combination of information technology and communication technology. It is an imprecise term frequently applied to broad areas of activities and technologies associated with the use of computers and communication technology. Information technology (IT) is defined as the study and use of electronic equipment, especially computers, for storing and retrieving information (Oxford Advanced Learners Dictionary 7th Edition). Communication technology (CT) is the process of sending, receiving, and exchanging information through network systems. With the help of information technology (IT), any information can be exchanged from anywhere and anytime without any borders. This information exchange is possible through LAal, expanding and connecting to other networks globally (Rhine, 2006). There are special characteristics of ICT applications. Some of these special characteristics are effectiveness, efficiency, and innovation. These two combination technologies include multimedia PCS, lap tops, digital cameras, video, and WAN, WWW (World Wide Web), floppies, CDs, and DVDs, E-books/Virtual Reality, interactive TV and radio, and telecommunication satellites.

CONCEPT OF LIBRARY

A library is a collection of materials, books or media that are easily accessible for use and not just for display purposes. According to Eberhart (2010), a library is a collection of formats that are organized by information professionals or other experts who provide convenient physical, digital, bibliographic, or intellectual access and offer targeted services and programs with the mission of educating, informing, or entertaining a variety of audiences and the goal of stimulating individual learning and advancing society as a whole. Online activities are a growing part of many people's lives, both engaging in interactive and social events on the web and increasingly becoming active partners in creating new content. It has become a unifying term for new technologies that enable users to interact and personalize web sites. There is a wide range of literature concerned with exploring the techniques (Miller, 2005; O'Reily, 2005; Maness, 2006) and there are also a number of examples of how these techniques have been implemented in a library context. "Library refers to a growing area of interactive and social tools on the web with which to create and share dynamic content (Connor, 2007). Libraries have always played a significant role, enabling people to engage with all kinds of information and knowledge resources (Curran, et. al., 2006). Brevik (2006), for example, states that a library is the natural evolution of library services to a level where the library user is getting the services she needs and wants.

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Fetcher (2006) provides the following formula: "Library = (books in stuff + radical trust) × participation". Casey & Savastinuk (2007) state that a library should include three elements. These elements should include three elements. These elements are the library as a model of constant change, giving library users control through participatory, user-driven services, and implementing these to improve and reach out to both present and potential users.

CONCEPT OF LIBRARY SERVICES/TYPES OF LIBRARY SERVICES

The future of library service has almost no limitations, and libraries will be the professions spearheading innovations in service (Chu and Zhang 2008). Gradually, social and economic changes have prompted libraries to develop services. The staff has a vital role in the satisfaction of users.

TYPES OF LIBRARY SERVICES

The library's services and facilitates include reservation service, online reservation services, online reservation of books, recommendation of library materials, current awareness service, photocopying/printing service, orientation and information sessions, selective and multimedia section, and more.

A. *Circulation Service:* Library materials are borrowed and returned at the circulation desk, which is located near the main entrance. Reserved books, audio-visual materials, periodicals, reference books, and materials (periodicals, reference books, and CDs/DVDs) can be used in the library.

B. *Reference Service:* The library provides reference service and referral service to its users. Queries are answered using all possible sources. If the required information source is not available/accessible at IST library, the users are referred to other libraries where the required information may be available.

C. *Online Reservation System:* Library users can reserve any book using our online reservation system if it is already issued. Reserved books are not reissued. Library users are automatically informed through email when a reserved book is returned, and the same is held at the circulation desk for two days. If the reserved book is not collected within two days, it is issued to other users or shelved.

D. *Recommended Item:* Library Board of Trustee welcomes faculty, staff, students, and other members to recommend any material that can add value to our library collection. The purchase of the recommended item is subject to approval and the availability of funds.

E. *Current Awareness Service:* Library members are regularly informed about recent acquisitions in the library. A list of "NEW ARRIVALS" is sent to the library users by e-mail on a regular basis.

F. *Inter Library Service:* Materials that are not held by the libraries might be borrowed temporarily from other libraries on an inter-library loan basis. To avail this facility, users need to submit their demands to the HOD (Library).

G.   *Photocopying/Printing Services:* This is also available in the library. Users can get the photocopying of required information from reference materials (like reference books, encyclopedias, dictionaries, journals and magazines, etc) on payment.

H.   *Orientation and Information Sessions:* This program extends the role of the library in ensuring that users make the most effective use of library resources. This program is designed to educate faculty members, students, and staff about locating printed and electronic knowledge resources to fulfill their information needs. This service is provided on an individual and group basis.

I.   *Selective Dissemination of Information (SDI):* Keeping in view the area of interest of the library members, selected materials are provided to them in order to keep them abreast of the knowledge in their field.

J.   *Audio/Visual Service:* Library members can utilize audio-visual resources available in the library. To facilitate users, necessary equipment has been provided for this purpose. Library staff also extends help to the members in using these resources.

K.   *Multimedia Section:* A multimedia section has been established in the library with 10 of the latest computers equipped with multimedia and internet facilities. The equipment required for the use of different types of information media (like CDs, DVDs, audios, videos, etc.) is available in this section so that users can have better access to the information in digital format (Institute of Space Technology, 2015).

THE ROLES OF ICT IN LIBRARY SERVICES

With the influence that the roles of ICT have pose on library service, it has help the Liberians to work as information broker, navigator and information expert for example the Liberians to work as information expert for example the services the Liberian is going to offer shall compel new methods of classifying and cataloging internet resources search engine. According to Jain, (2010), the available information present in the libraries can be fed to the home page and made available to users anywhere. In order for the library service to be properly rendered, the librarian can carry out these services effectively with the help of an in-depth knowledge of ICT applications since his total commitment is to be a processor and disseminator of information to the user.

The ICT roles in library services are seen in the following areas;

a) Communication skills: It helps librarians achieve both verbal and communication skills.
b) Adoption abilities: ICT teaches Liberians how to adopt new techniques and technologies based on current trends.
c) Management skills: Besides the traditional management skills, the evolution of ICT has helped in the storage of a large data base on a chip for a long period of time.

d) Update of knowledge: ICT gives an up-to-date delivery of information in a simple, clear, and time-saving way. And Jah, P. B (2010) admonishes that with updated knowledge, better and more reliable library services are guaranteed.

e) Marketing skills: it helps in the promotion of library products and services. Hence, marketing skills are essential for the marketing of library services.

Offer roles in areas where, through the help of ICT, it is possible to acquire information such as books, journals, newspapers, etc. easily and speedily. Most publishers have their own websites on the internet, and their catalogue can be searched from the library for new publications. Liberians can place their orders online and clarify doubts if there is any piracy of materials. Some of the reputed publishers also provide online access to their publications. ICT helps to check documents easily. If the documents are available, it can be issued to users. The document can be issued electronically by making use of barcode strips pasted externally on the documents. Referencing is the backbone of any library. A well-organized library will always provide reference service with prompt and accuracy. The internet contains a large number of primary and secondary information sources, which can be used in providing information to users. And with the help of the increasing cost of documents and the non-availability of enough funds, libraries are unable to provide each and every material to their users. But thanks to ICT, the library solved these problems by searching the OPACs of other libraries for documents on inter-library loan.

A modern library provides production of e-journals and periodicals. It also provides internet and CD-ROM facilities and other document supplies, CAS, SDI service, telecommunication technologies, telephone, video text, facsimile or fax, library networks, online retrieval services, etc. In short, ICT will help to remove the barriers of distance, time, and drudgery of repeated manual effort in library routines. The advancement in technology will continue to improve the effectiveness of libraries and make them indispensible for handling messages between libraries and library users (Takale, Veer & Rathod, 2010).

ICT AND LIBRARY AUTOMATION

One obvious historical lesson has taught mankind that the bane of ignorance is severe developmental retardation, which has a direct bearing on the amount of information available and accessible for such a development drive. To this end, in the 21st century, information is a vital survival resource along with other basic natural resources, e.g. oxygen, labor and water, land, and capital. The automation process entails the integration and application of the intricacies of information communication technologies (ICT) into the work activities and routine duties of the information business. Library automation, according to Desh Pandel (2013), is a generic term for information and communication technologies that are adapted to compliment and supersede manual systems in the library. Okoroma (2010) asserts that in Nigeria, few libraries have converted some aspect of library services to varying degrees of automation. Horsfall & Fagbemi (2015) opined that automation of libraries in Nigeria continues to progress daily but is marred by a lot of challenges. Kwanya et al. (2015) explain that ICTs have connected inter connectivity possibilities beyond the limits of geographical boundaries. Consequently, you can create and access information with the

click of a button. Thus, the automated process becomes cost-effective in serving the many library users across the globe. The automation main area of focus in the library is cataloging attention, as opposed to other sections, as opposed to other sections such as circulation, serials, reference, and acquisition.

THE CHALLENGES OF ICT IN LIBRARY SERVICE

Despite the availability of wide applications offered by ICT, it has been observed that the application of ICT to library services in Nigeria seems inadequate, probably due to the variety of methodologies used for simple literature review. And with all of the above listed roles that ICT has played for the effective provision of library services, there is a longstanding challenge of ICT in library services in Nigeria militating against the effective achievement of the inherent roles emaciated above. Adebayo et al. (2018) state that despite the availability of wide opportunities offered by the advertising of ICTs, it has been observed that their application to library services seems inadequate due to a wide range of enormous challenges. Inadequate funding, high costs of ICT software and/or operation, poor maintenance culture of ICT equipment in libraries, unstable power supply, a shortage of library personnel, technophobia, and a lack of compliance with any copyright law that governs the smooth operation of a library.

SUMMARY

Information communication technology (ICT) has been supporting education, research, and development in different ways. It plays an important role as a link between users and librarians. Information and communication technologies (ICT) have had a profound impact on the way information is gathered, stored, organized, accessed, retrieved, and consumed. ICT has helped and supported libraries to overcome the barriers of time and space. Many countries and their university libraries have begun to rely on information and communication technologies (ICT) as a result of electronic information. ICT is the combination of information technology and communication technology. Despite the tremendous role ICT has played in the library service, it also has its own challenges, and the inadequate application of ICT to libraries is a major concern.

RECOMMENDATIONS

1. The government should provide constant electricity power supply to libraries in order to ensure the stable use of computers in libraries.

2. The government should subsidize the price of ICT software, to make it easier and more affordable.

3. Every quarter, librarians should organize a free training session for library users on how to use ICT equipment in the library.

4. In order for the library service to be properly rendered, the librarians must have an in-depth knowledge of ICT applications.

5. Librarians should post the rules guiding the library and ICT equipment in the library building or environments for users' knowledge.

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