# LIBRARIANSHIP IN THE DIGITAL AGE: BENEFITS, CHALLENGES, AND STRATEGIES FOR EFFECTIVE MANAGEMENT

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**ABSTRACT:** Librarianship is all about getting people out of the knowledge circle to give the community of users the necessary information. The shifts in the way material processing, delivery and recuperation are viewed as culture technology progresses. The goal of this study is to illustrate the role of ICT in the production, management, storage, retrieval and diffusion of knowledge for the productive delivery of services. The research thus explored the notion of why the urge for ICT library operations. Based on the literature revealed, poor countries such as Nigeria, Cameroon, Chad, etc. are significantly behind schedule and will not be able to reach and be successful in industries unless they strategize attempts to adopt a new Technology. The advantages of using ICT in information centers are enormous as internet services can also be used to access research education, networking, and even entertainment content. It was also shown that the boundary of distance, time and cost were closed for things to happen with implemented ICT driven libraries.
**Keywords:** ICT, ICT Literacy, advantages, challenges, and strategies.

## INTRODUCTION
The advent of ICT and its incorporation into librarianship is found to be the greatest breakthrough ever registered in the history of mankind. Thus, for the first time, one can access information sources from other digital libraries without adopting the boring resource sharing protocol. In particular, the impoverished countries of West Africa cannot wait to benefit from this new development. But even at that, owing to chains of obstacles, these resources have not been adequately and effectively used. The current rapid ICT advances have significantly changed the complexity of the library's work. Such accelerated changes also created enthusiasm among the stakeholders to construct new libraries and facilities suitable for providing effective services. It has also brought about new ideas in the library approaches such as the virtual library and the multimedia archive to come into being. This technology has brought about a shift in library operations globally and underdeveloped countries are no exception. But behind the rapid modifications implemented by ICT development, the poorly developed libraries are still lagging (Seyed and Tajafari, 2012).

The phrase "digital age" is vague to many and many librarians often feel embarrassed that they are connected with it. Despite the nearly daily development of its principles, approaches, and implementation, ICTs are not widely recognized in terms of their meaning. This may not be unconnected to challenges arising from financial instability and technophobia as a result of the needed commitment involved in the procurement, installation, and upgrading and the high cost of maintenance and sustainability. A good way to understand ICT as a tool is to understand the advantages of computer technology in information selection, acquisition, organization, storage, retrieval, and dissemination in various ways to a wider community without considering the distance. ICT covers all items that are physically processed, accessed, altered, exchanged and obtained electronically. Information Communication Technology (ICT) can be defined as the use of any computer and the Internet to make data and information services accessible to the user community or library patrons. The word is widely used to discuss a variety of techniques, including devices for ICT. The ICT application is used to handle one or more library routine operations, such as acquiring, serial monitoring, cataloging and classification, and the OPAC. This includes the concept of using data handling, storage, processing, and dissemination techniques in general. ICT can also be seen as an information communication facility and element for contemporary computing (Rouse, 2017). She also points out that this term covers all IT, network components and application software for digital world connection. In agreement with other scholars, Rouse also noted that this term encompasses both information technology, networking components and application software, and facilitates interactive connectivity.

The rapid progress in ICT has significantly changed the scope of the function of the library. Such swift improvements led to the introduction of new libraries and forms of services. New ideas have arisen to the development of electronic collections, such as the digital collection and the virtual library. There have been improvements in library research worldwide and poorly developed countries are no exception. As they progress in ICT has significantly affected the scope of the library's task, poorly developed libraries live to regret their inabilities to partake in the global information management changes. Such rapid changes have led to the introduction of new libraries and specialized services (Seyed and Tajafari, 2012).For effective use of these technologies being a shift from the traditional to the digitalized form of operation, I require a vigorous and radical training or capacity building to enhance the library staff

skills. A capacity building or training can be seen as an ongoing increase in the understanding, skills, and behavior of employees that the library requires for its daily work. It is used to characterize a range of library staff's abilities to maneuver ICT related information sources such as e-resources and the Internet by using computers and all other related technology to generate, save and disseminate information. It is seen as an on-going development in the perception, ability, and behavior of people in the libraries in dropping the old ways of doing things and embracing the new and the most effective way of carrying out library operations with the view to improving service delivery. There is no doubt that both developed and developing nations are aware of the exploits of ICT in standardizing a professionalized library operation. Considering the economic meltdown in the global market that led to an increase in prices of commodities and information resources inclusive, librarians have to strike a balance and face reality on how to understand the need for ICT for library services. Even with adequate finance, distance, time, space, location and the stress involved may not make a manually operated library to be globally current. This writes up is an attempt to throw more light on the hindrances that most libraries faces and the strategies to overcome them for sustainable development.

## The Objective of the Study
The need to elaborate on the usefulness of ICT owing to the consequence of the flow of information and expertise in a variety of contexts and areas of specialization, is very crucial for efficient library service provision. The purpose of this study is to expand on the effectiveness of ICT in discharging various library operations to improve service quality. It also dwelt on some of the difficulties faced through the use of the technology as well as presenting strategies for productive use of the technology.

## ICT Skill and Training in the Library Domain
Research has shown that the inability of most of the developing countries to succeed in actualizing the dream of full utilization of ICT was due to technical knowhow. There is a need to strike a balance between the cost of acquiring the facilities and the cost of staff capacity building if success must be recorded. These ICT facilities are robots that must be guided by the same library staff before it works. ICT literacy is described as the continuum degree of competency level of the library employees to perform a specific job using the information technology facilities for service delivery. Ferreira et al (2007)

highlighted the need for education and training whose abilities require knowledge, skills, and behaviour for all information practitioners for a breakthrough in the discipline. Knowledge is meant to assess the competencies of IT management personnel by using software to execute those tasks that influence the provision of services. Ojiegbe (2010) sees competencies in another growth as a way of showing a person's understanding, skills, expertise, and characteristics to effectively perform a certain function. Competency is a set of predefined skills that provide a structured guide against which proficiency of individual performance in executing a task is being measured and evaluated. He further emphasized that ICT encompasses any product that package, collect, exploit, distribute and receive information digitally in electronic format. Rouse (2017) on the other hand pontificates that ICT is the information equipment and product that facilitate contemporary computing. She emphasized that this is a word that covers all IT, virtualization and software features that enable communication in a digital globe. Even though ICT literacy and competency are crucial for library development, it is important that a job is done with efficiency, consistency, and power and this can only be achieved using ICT.

## ICT in Library Domain

The usefulness of ICT is much greater than the cost of purchase and maintenance, as it is effective, timely and stress-free compared to all the writing surfaces that ever emerged in the history of the whole world. It is therefore capable of considering all aspects of human efforts while used in carrying out functions. Emezie and Nwaohiri (2013) have endorsed that the library does not have a single area where there is no ICT prerequisite for library activities, and yet library businesses face chains of obstacles in an attempt to accept it. Most of the difficulties that the investigator raises are not far from the obvious problem of ICT awareness and training on the part of technology operators and the budget constraints that can be continually addressed. Information technology's utility much exceeds the price of accessing and maintaining that because it is effective, secure, and pressure-free. It was also strongly supported by Emezie and Nwaohiri (2013) that there is no single element in the library operation that does not require ICT for library operations and yet libraries are facing chains of difficulty in an attempt to implement it.

The digital communications technology has been the latest in libraries using the electronically operated libraries with the aid of computer network operations and services. Currently, the problem of creating, encoding, saving, accessing and disseminating information in libraries is all about clicking a button to reach your preference of knowledge. Ironically, IT systems can be used as libraries in three categories, system, storage media, and telephone. A machine that is mathematically controlled technology is used to perform functions like in the fields of library and information management because the central processing unit (CPU) has a certain volume of data space, extra storage devices, such as magnetic disk and tape, and audiotape are required. the most common auxiliary storage device that are used to store information in all forms required is the disk because of its simplicity of usage. Another type of ICT use in the library is telecommunications, which has the function of globally transmitting or communicating information or signal in the global market. (Eseohe, Ehikioya, and Simeon (2014)). With ICT, library staff and the clienteles are sure of benefitting the following:

## Acquisition of Information Resources

ICT has globalized the circulation of publishers' catalogs for librarians to make the selection of their choices. This has in the first place reduced the price of the materials since the service of the retailer or vendors have been done away with. It assures librarians that whichever title they select will be supplied as distance and location is not a barrier. It has now become possible through the online process to submit feedback or queries and request the procurement of library content and make payments without moving out of the office. It has even made it possible on their website to communicate with publishers and vendors to conduct business more than the physical connection or interaction.

## Cataloging of Information Materials

What makes the difference between a library and a bookshop is careful classification and cataloging and arrangement of the subject matter and heights or sizes according to the subject. That was why librarians were sensitized about the need to ensure that their resources are properly cataloged and classified for effective and efficient use. Today, ICT has allowed remote libraries to access the vast repositories of the larger libraries in developing countries to accept or adjust their bibliographic data for their library use; and indeed, electronic catalogs have changed the cataloging and classification environment (Adeleke and Olorunsola, 2010).

## Classification of Information Resources:

The challenges of maintaining a single version of the classification scheme, which classification scheme to use and what sort of library to use such classification were a problem among librarians in the olden days. As ICT evolves, many online records are made available from which the class mark of books with the same title and author can be copied. The challenge of opening a book from page to page to ascertain its subject is no more relevant. Prominent among such online catalogs are the British Library catalog, Australia's catalog Trove-National Library, and the electronic index of the Library of Congress. Those databases can be searched online as records and copies are always available to libraries for cataloging their materials/books which have brought about a unified catalog in the global market.

## Online Public Access Catalogue (OPAC):

It's a transformed way of using ICT to access information services and their locations using the internet service. Instead of using a single library's catalog cabinet, ICT through OPAC allows users to access stocks of various library collections. This reduces the cost of keeping a library collection and has eradicated pen and papers, as well as helping to plan the community-catalog. It is said to be the fastest way to obtain updates on the collection, visitors every week and other recent library additions.

## Digital Library

The base of the digital library is a computer and computer network because the reading material cannot be processed in the digital material without the computer and even no published books can be modified to digital form. In digital libraries the entire reading material like PDF, HTML, Audio, video, and services, etc. Also, depending on the computer and network. Today, most researchers tend to bypass librarians that are not able to have such facilities and services in their libraries. This aspect calls for the additional acquisition of ICT literacy for the library staff must be current and functional.

## Resource Sharing Among Sister Libraries

The popular saying that what makes the difference between the poor and the rich is the provision of the right information at the right time to the right user. With ICT on board, it has enabled resource sharing among the networked and automated libraries and information centers globally. It provides a great prospect for sharing both the human and material resources of a library with

other libraries. The role of technology is very much significant for cooperative acquisition, cooperative processing (cataloging and classification), exchange of information materials (e-resources), joint publications, networking, joint training of personnel, interchange of staff for seminars, and workshops (Igwe, 2010

## Use of Library Automation Software

One of the most excellent activities of ICT in information resource control is the issue of automation that has eliminated the human involvement for library services. The current automation technology aims to provide maximum services within the shortest time and lowest cost. Library automation is the application of ICTs in libraries to carry out library operations and services to enhance quality services to the user community. Many library automation software are available for library operations such as the TINLIB, Koha, etc that libraries are at liberty to choose and use. The function of the software is to automate the library systems covering acquisition, cataloging, circulation, serials management, stock verification, etc. ICT is used in various library housekeeping operations as well as for different library activities and services.

## Radio Frequency Identification

Gone are the days where registers are used to record borrower's lending and receiving function in the library. This new technology has changed the way of library transactions (check-in and check-out). Libraries are providing ICT-based library services to increase the possible ways of fast and user-friendly services. One of the best inventions of technology for the library is the 'Radio Frequency Identification.' Nowadays, libraries are adopting this technology to provide an enriched and efficient library service. This is aimed at saving the time of the users by providing quick and effective services to the desperate information seeker

## Closed-Circuit Television

This is one of the greatest impacts made by ICT on the security issue where a special camera will be placed in a hidden corner and will be recording all activities going on in the library. With this instrument in the library, librarians do not need to have supervisors to monitor those who abscond from work or those who are not doing their duties effectively. It has also overcome the issue of theft and mutilation in the library either through carnival on the part of the staff or the user alone. Comparatively, the cost of maintaining the technology

and the degree of accurateness in terms of reporting pieces of evidence that took place, CCTV is cheaper.

## Challenges Associated With ICT Use for Effective Service Delivery in Nigeria

The introduction of ICT into librarianship, though, it is a breakthrough, many librarians still have the feeling that one is bound to face another challenge. It is based on the above that the following items remain problems in our libraries:

## Change Resistance among Library Staff

The process of shifting from the manual means of library operation to the ICT driven technology is a change. In this ICT age, the traditional printed counterparts are quickly replaced by digital data. This change has brought about modifications in the collection, conservation, and dissemination of recorded information globally. Changes can be accepted when the reasons for the change are well explained to the parties involved, particularly, what each stands to benefit. But most of the change here is done in secrecy such that library staff are not even aware of what is happening. They felt that this ICT is coming to displace them of their positions and cut off the existing relationship maintained between them and their clientele. It is quoted as one of the biggest barriers that all libraries and librarians face when they try to introduce change. Each individual has a threshold for the amount of change they can absorb.

## Compatibility of the Library Staff Skills and Technology Change:

Following the introduction of ICT, which is simple to handle and facilitates the performance of any given task, libraries and librarians are also required to assess the computability of their employees about the technology they have introduced, not only this, most of the spare parts are drawn from various countries and replace inferior quality in the process of changing the spoiled parts during repairs. Several libraries have had to purchase the new ICT technology to retain the latest technology and to gain a cost advantage over their counterparts. Sometimes, all their initiatives have been wrecked because staff working with such a technology are not in a position to gain the advantage of new technology and are interested in working on new technologies that have been adopted.

## Technology Sustainability

Another challenge that faces librarian practitioners is the resilience of technology as the bulk of library staff in Nigeria cannot even recognize what might be wrong if certain functions are not done by a computer, much less how it is fixed. The innovation is growing and changing rapidly, while previous technologies are that constant while retaining those substituted is a serious issue that has a serious impact on the provision of services. This always gets librarians off track since they cannot stop the changes in the innovations typically in developing countries like Nigeria.

## Funding Problem

Knowing well that the library is not profit-generating entities, funding has always been a problem. Developing countries like Nigeria whose leaders are full of selfishness has little or no business with libraries. Surprisingly, even the so-called university vice-chancellors who depend solely on how best to promote education, do deprive librarians of library budgets. Unfortunately, for the fact that most of the librarians lack credibility, they equally submit to the dictatorship of the boss. Sustainable financing is needed to ensure fast and transient technological developments. Even if the library already has the facilities on the ground, it becomes difficult to sustain them with the meager funds allocated to libraries.

## Lack of Expertise in ICT Literacy among Library Staff

Technical experts and assistants with a high standard of ICT application and experience of maintenance in libraries are still lacking. This can be attested in some libraries that even though there are different ICT facilities in their custody, but they do not operate. For fear of security and how to source money to pay the workers, librarians cannot afford to go and hire these repairs.

## Strategies for Effective Digital Librarianship

Problems always point to the direction of success to those who want to face realities. Having discovered the chains of challenges confronting effective use of ICT for library services, the following strategies are worthwhile to improve the acceptability and usability of ICT in the Nigerian university libraries:

## Provision of Proper ICT Training for Library Staff

Vigorous training should be given to library staff since the call for ICT professionals in Nigeria to support the development and growth of ICT by

reducing their price of installation of ICT facilities to university libraries is not yielding fruit. To this purpose, the skilled library staff should receive adequate ICT management and implementation support as motivation and encouragement to acquire all the needed skills to minimize installation and maintenance prices. This will not only alleviate the difficulties of getting the technicians timely but promptly at giveaway prices.

## Mobilization for Financial Support for Libraries

Alumni and state governments should enjoin to support libraries located in their respective states. This has been one of the objectives or priorities of states to ensure that education is well catered for. And by funding libraries in their vicinity, it will alleviate the financial constraints of the library thereby providing better services to the community.

## More ICT Awareness for Library Staff and Users

The library personnel and users should be better informed about the need for using ICT and its advantages over the traditional library operation. In other words, if library staff are well aware of the importance of ICT in carrying out their duties, they have had the privilege of endorsing it, realizing that they will only need to make a little effort to conduct their daily services. The rationale is that ignorance has an impact on good motives.

## Strengthening of ICT Policies

There is a need for public libraries in Nigeria to adhere strictly to the policies on ICT implementation for national development. This will leverage ICTs to improve and support different initiatives and sectors leading to socio-economic development in Nigeria not only in the education sector. Government agencies such as National, state, university, and other libraries should see the National Information and Communication Technology (ICT) Final draft policy of 2012, as a call for stakeholders to consistently enforce their libraries' action plans.

## CONCLUSION AND RECOMMENDATIONS

In reality, it is hard to believe an entire globe without computer technology today. The accessibility of ICTs for academics, computer professionals and organizations are composed of the entire scheme. It has become rather simple and quick with the assistance of ICT to achieve their recipient's services and it has also saved everyone, both the user and the manager's time. Today, ICT

has completely altered the idea of having a library with a well-stocked information resource is beginning to be a thing of the past. Information centers and related agencies are now embracing ICT to undertake both housekeeping activities as well as to continue to offer services to information seekers. ICT implementation has created additional value for facilities and information centers as they are becoming common between and within librarians. In fact, with ICT on board, information centers are marching towards attaining the objective of offering targeted, exhaustive and expeditious data to those in need of that data.    Library experts must also investigate the user enrollment for them to be able to understand their information requirements and their conduct requiring data before implementing any specific service. The conclusions of this kind of research would provide the library specialist with some development plan.   So many issues require knowledge managers to maintain up-to-date and up-to-date on the global practice and developments not only within the industry but in all associated areas as well. In short, we could still conclude that the implementation of ICT in information centers would pave way for experts to achieve libraries ' main goals and that the primary goal was to provide the correct user with the correct data in the correct form and layout at the correct moment.

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