



Special Libraries in the Twenty First Century: Approaches, Challenges and Strategies for Effective Services Delivery

Salma Mundi (CLN, FCA)

+2348035970877, salmamundi@gmail.com

National Judicial Institutes Library, Abuja

Abstract

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 in special libraries. The research thus explored the notion of why the urge for ICT library operations for effective service provision. Based on the literature reviewed, it was revealed that poor countries such as Nigeria, Cameroon, Chad, etc. are significantly behind schedule and will not be able to reach and be successful in benefiting the numerous advantages brought about by ICT in information management industries unless, they strategize in adopting the new Technologies. 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 that have been considered as hindrances to access information globally, could be achieved with implementation of ICT driven libraries particularly in special libraries that requires a specialized ways of acquiring, organizing and disseminating information to their clientele.

Key Words: Special libraries, ICT Literacy, approaches, challenges, and strategies.

Introduction

The concept of special library emanated from the emergence of the need to have specialized information for a particular group of individuals or profession to enable them solve a particular problem. Special library has long been seen as an institution or information repository where majority of people run to in order to access special information in a specialized way to satisfy their curiosity. It can also be seen as an authoritative storehouse or building containing collections of knowledge or information resources from the previous centuries, present and possibly predicted information that might be useful in future. However, it has been discovered through studying usage trends in spectrums of disciplines that the relevance of suitable areas in various institutions are diminishing, particularly among younger users, and progressively for all users (source). Library professionals in the last few decades only understand the importance of controlled paper resources, while the subsequent generations of users have prioritize accessing information with ease and speed above meticulously produced and original print compilations (source). Information centers must assess their potential to transform from simply physical sites to composites with both digital resources, and eventually, people anticipate, to largely online databases, if they are to become relevant in these virtual entities..

For effective utilization of Information repositories according to Abdullahi and Mamza (2014), they are expected to be fully made available online requiring both the information managers and the information resources and sources to circulate globally. This implies that, expert in various library operations such as catalog indexing and searching, as well as being able to connect to and search massive computer database are expected to be accessible by the global community of users. The simulated institutions will have no walls, but will have extremely fast internet connected relationships to library resources and services by individuals, institutions, and corporations around the world (source). Publications in the Era of digital age require



organized collections that can be made available not only to the user community but to the global village.

Understanding what tasks and functions that evolves in a technological sense is one of the most pressing project requirements that guarantee an effective special library. This same old architecture of collection is laborious and its role is drastically shifting to a more improved trend of managing resources (source). Institutions or libraries could not indeed work in a vacuum in today's electronic medium without proper orientation and enhanced funding. Protracted accessibility and maintenance, which has traditionally been the duty of special libraries are increasingly requiring cooperation amongst previously improbable parties. This intersection of these concerns will cause us to reevaluate the qualifications for persons who might just operate in communication jobs. Studies have shown the required guideline to hiring, teaching, and addressing who could be in charge of the collection (cite some of the studies that share similar opinion on that note).

Despite the increasing transformations recorded in ICT use, one consistent issue that remains is to find ways through which information resources can be accessed to the highest level for research fellows. Do special libraries require specialized training for their library assistants to develop innovative opportunity to integrate users to resources in order to enable cognitive research and the generation of new information? How will library professionals provide such a model and structure that will be of great importance to the entire system? It is therefore very important to device means through which how library services can be reformed to provide increased verified files and documents that will meet the demands of clients for genuinely valuable information. This should be a battle that needs to be fought if libraries must be classified as special in this digital age (Abdullahi & Mamza, 2014).

More to that, the shifting trends in information environment as well as evolving library users' pressures, are prompting libraries to reconsider their position in the modern information management system. To succeed in the changing surroundings, there is the need to understand benefits of constantly reviewing the evolving technological developments in order not to be obsolete in the current operation trends in using digital materials, how to preserve them, and how to run the library of the future. Emezie and Nwaohiri (2017) explicitly endorsed that there is no single area in the library activities where ICT is not considered as a prerequisite for effective operations and yet library businesses face chains of obstacles in an attempt to accept it.

It is in view of the weakness encountered in using the conventional libraries; patrons in the digital era have unique expectations in accessing information exhaustively with little or no stress. They aren't always concerned with the library's authority in establishing appropriate collections but the ability to link them to the world global information (Mamza & Bassi, 2014). It is obvious that patrons are solely interested in digital materials because of their flexibilities. They value convenience and the capacity to get knowledge without relying on librarians who occupies the position of linkage between the resources and the clients. The need to have ICT in special libraries makes a great difference in having a total control of information flow.

ICT is a broader term for Information Technology (IT) which, refers to all communication technologies such as the internet, wireless networks, cell phones, computers, software, middleware, video-conferencing, social networking, and other media applications and services that allow users to access, retrieve, store, transmit, and manipulate information. However, the concepts, methods, and tools used for ICTs are constantly evolving daily. 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 and ICT literacy skilled library staff to change conventional libraries to a global standard. There is no universally accepted definition of ICT. These ICT tools are also indispensable to professions and researchers because of the current volume and complexity of information available from different sources (Antim, 2018). Success in using ICT for effective library operations by the library staff cannot be feasible without having ICT literacy.

The term information communication technology (ICT) literacy skills is the capacity to utilize, identify; manage; incorporate; assess; build and convey information in a moral and professional way to operate within the global context, using digital technologies (Oyedokun, Oyewum, Akanbi & Laaro, 2018).. Kumar, (2017 believes that ICT skills have become a prerequisite and central focus when judging a candidate for employment in librarianship or information-based organizations. Ugwuanyi (2011) also emphasized the importance of ICT literacy skills that, it is the most effective way for one to satisfy his information needs in this information age. He further argued that the capacity of users and librarians alike to exploit the internet depends on the level of literacy, education, and mastery of the technologies concerned". Similarly, Anyim (2018) noted that a successful acquisition of ICT literacy largely depends on the seriousness of institutional administrators, adequacy of funds, the willingness of the trainers and time convenient for participants to leave their job and go for short courses at given intervals over a long period without being restrained in the office. It in view of the above assertion that prompted the need to bring out some of the benefits of using ICT in special libraries with the view to having effective services delivery to the user community.

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. This study is aimed at expanding 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.

Applicability of ICT for Effective Operation in Library Settings

The role of ICT in all aspects of information management cannot be over-emphasized. Buttressing this issue, Ejedifiru (2010) pointed out that ICT technology has revolutionized the pattern of information storage, retrieval, and dissemination in a quick, effective way and with less expense. Prominent among the cheap and most effective technology-related devices that have been used for information storage, retrieval and dissemination are cell phones, audio players, video recorders and players, etc. Those facilities have made the world a global village, since events can be recorded, without mixing words, digital communications technology is the latest in libraries that are electronically operated 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 (Mamza & Bassi, 2014).

Owing to the relevance of technology, Krubu and Osawaru (2011) noted that libraries require current technology to ensure that their core functions, such as the implementation of efficient and effective library cooperation and resource sharing networks, implementation of management information systems, developing institutional repositories of digital local content and digital libraries are automated. There is no doubt that information and communication technology has revolutionized the process in which information services are provided to team users. It can also be said that repetitive library operations have taken on a new dimension,



especially in the areas of information generation, dissemination, and transfer from one region to another. According to Emezie and Nwaohiri (2013), Librarians are no longer the custodians of physical books that are always covered with websites, but have instead become portals to online information resources. The description of their role in information management as passive personnel has also changed to active information managers. Interestingly, libraries using the ICT have the ability to excellently achieve the following routine operations:

Acquisition of Information Resources:

Information technology has democratized the circulation of publisher catalogs, allowing librarians to make more informed decisions. This has, first and foremost, decreased the cost of supplies by eliminating the need for store or vendor services. It ensures librarians that whichever title they choose will be delivered, regardless of distance or location. It is now able to give feedback or questions, request library content acquisition, and make payments without leaving the workplace via the online method. It has also made it feasible to contact with publishers and vendors via their website in order to do business without the need for a physical connection or encounter.

Cataloging of Information Materials:

What make the difference between libraries from bookshops 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 (Mamza & Bassi, 2014).

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 and Packages:

One of the 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 (RFI):

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 (CCTV)

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 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, etc.

Challenges Associated With ICT Use for Effective Service Delivery in Special Libraries.

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:

Technophobia and 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 (Abdullahi & Mamza, 2014). 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 either for the fear of approaching the technology or benefits derived from manual operations.

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.

Inability to sustain the available Technologies

Another challenge that faces librarian is the resilience of technology as the bulk of library staff in Nigeria cannot even recognize what might be wrong if certain functions fail to operate in a computer, let alone how to fix it back. 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 Nigerians. This is why both new and old ICT faculties in our libraries are found grounded or not functional as minor errors cannot be detected and corrected

Poor infrastructural Facilities and Incompatible Accessories

The ongoing underutilization of ICT in our special libraries has a serious impact on how libraries use ICT tools to deliver effective and efficient information services to the community of users. This view was stressed by Oyedokun, Oyewumi, Akanbi, and Laaro (2018), noting that inadequate provision of ICT infrastructure and in-depth digital skills among library staff deter both library staff and information seekers from making good use of ICT tools. Considering the fact that compatibility of spare parts during repairs also affects foreign made ICT facilities because their strengths matters a lot.

Poor and Inconsistent Funding of Libraries

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 library managers who depend solely on how best to promote education do deprive librarians of right library budgets and do not release them regularly. Unfortunately, for the fact that most of the librarians lack credibility, they equally submit to the dictatorship of the bosses for the fear of losing their seats. Sustainable financing is lacking 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.



Librarians 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 after having various ICT facilities in their custody, most of them are still not functional. For fear of security and how to source money to pay the workers, librarians find it difficult to go and hire experts to do the repairs.

Strategies for Effective Digital Librarianship in the Twenty First Century.

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 special libraries:

Organization of In-house 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 in libraries is not yielding fruit. For this purpose, the skilled library staff should receive adequate ICT management and implementation incentives as motivation and encouragement to enable them acquire all the needed skills to minimize installation and maintenance costs. This will not only alleviate the difficulties of getting the technicians timely but promptly at giveaway prices.

Instantiating Mean of Generating 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. In addition, by funding libraries in their vicinity, it will alleviate the financial constraints of the library thereby providing better services to the community.

Creation of Awareness for Library Staff and Users on ICT Usage

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 and Ideologies

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 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.

Recommendations and Conclusion

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. It calls for the need to have ICT knowledgeable information 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. 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 and hence, proper funding is needful.

There is no doubt that, the usefulness of ICT is much greater than the cost of purchasing and maintenance, as it is effective, timely and stress-free compared to all the writing surfaces that ever emerged in the history of the mankind whole world. It is capable of considering all aspects of human efforts while used to carry out housekeeping functions. 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. It has become rather simple and quick with the assistance of ICT for special libraries to achieve their recipient's services and it has also saved everyone (users' and managers') time. Today, ICT has transformed the previous culture of having a library with a well-stocked information resource. The implication of not providing the recommended items as revealed from the study will make special libraries to be ineffective in making ICT function in their libraries. This will translate to the inability to connect to the world of information. Users will be restrained only to the stocks of their individual libraries without having access to the current trends of information generation and management and that will eventually bounce back to the users who are always at the receiving end.

References

- Abdullahi Z. M. & Mamza, W. P. (2014). Current Trends in Information Service Provision to Rural Communities in Nigeria. *Journal of Information Resource Management (JIRM)* 4(1) 90-101. Nigeria.
- Adeleke, A. A., & Olorunsola, R. (2010). ICT and library operations: More on the online cataloguing and classification tools and techniques in Nigerian libraries. *The Electronic Library*, 28(3). Accessed at: 453–462. <https://doi.org/10.1108/02640471011052025>.
- Anyim, W. O. (2018). *Assessment of ICT Literacy Skills of Digital Library Users and Staff in Salem University Lokoja, Kogi*. In *Library Philosophy and Practice* (e-journal). Accessed 13/12/2018 from: <https://digitalcommons.unl.edu/libphilprac/1801>
- Ejedafiru, E.F. (2010). Lack of ICT infrastructure as a barrier to resource sharing in Nigerian libraries. *Library Philosophy and Practice*. Accessed at: <http://unllib.unl.edu/LPP/ejedafiru.htm>.
- Emezie, N. A. & Nwaohiri, N. M. (20137).. *Century librarians and effective information service delivery* In *Information Impact: Journal of information and knowledge management*. 4(2) 30–43 From <http://www.academicjournals.org/IJLIS>
- Igwe, K. N. (2010). Resource sharing in the ICT Era: The case of Nigerian university libraries. *Journal of Interlibrary Loan, Document Delivery & Electronic Reserve*, 20(3), 173–187. Accessed at: <https://doi.org/10.1080/1072303X.2010.491016>
- Krubu, D.E. & Osawaru, K.E. (2011). The impact of information and communication technology (ict) in Nigerian university libraries. *Library Philosophy and Practice*. Retrieved at: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1614&context=libphilprac>



- Mamza, W. P. & Bassi, M. D. (Dec., 2014) .A Survey of internet Access and Use by students of library and Information science, Modibbo Adama University of Technology Yola Library School: *Samaru Journal of Information Studies, Zaria*. 14(1 & 2) 20 – 25. Nigeria.
- Oyedokun, T. T., Oyewumi, F. A. Akanbi, M.L., & Laaro, D. M. (2018). Assessment Of Ict Competencies Of Library Staff In Selected Universities In Kwara State , Nigeria. *Library Philosophy and Practice (e-journal)*. P 1-36.
- Ugwuanyi, C.F. (2011). *Influence of ICT literacy skills on its application for library use among academic librarians in south east Nigeria*. Unpublished MLS thesis submitted to the Department of Library and Information, University of Nigeria, Nsukka.