Librarian and Librarianship in a Digital Information Era: A Review of Challenges and a Way Forward

By

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## **ABSTRACT**

The Information Age is a historic period in the 21st century characterized by the rapid shift from the traditional industrial revolution through industrialization, to an economy based on information technology. The shift has moved to online/soft resources in various electronic formats through the use of ICT devices. The society has also become sophisticated with people who are exposed to various information sources for socioeconomic development. As librarianship is a serious business, it quickly adopts the capacities needed to navigate the technological devices in the new information age. The idea is to offer effective and efficient information services to the users through universally accessed medium for research, lifelong learning and teaching purposes. Hence, the librarians in the new era add values and can make libraries truly useful and user friendly. This study examines the concept of digital library, digital librarian, new information age, challenges and the way forward. It was identified that a lot of capacities need to be built with new strategies of engaging library communities among other things to give visibility to librarianship in Nigeria and the needed service delivery for holistic development of the populace.

**Keywords:** Digital library, Digital Librarians, Librarianship, information Technology, Digital resources

### INTRODUCTION

The digital library is one of the unique platforms of the 21<sup>st</sup> century where the digital librarian is the navigator with the technical expertise in ensuring that ICTs are carried out for day-to-day effective services to the users. These require several characteristics plus the new skills and competencies that are essential for the new information era. The idea is for the librarians to be knowledgeable in a variety of information sources and follow the new trends and advancements in computers, media and publishing. It is obvious that the qualities needed for these smart roles highly technical which include digital archiving, preservation and metadata development.

Hence, the digital librarian is expected to acquire the newly acquired skills in order to play meaningful and leading roles in the networked information society of the millennium. Presently, we live in an information society where the development of information technology and telecommunication networks is accompanied by a corresponding increase in knowledge, with a rapidly growing flow of information. This new information environment requires new skills in seeking, processing and using information which the librarians help users find what they need by providing them with the tools to assess and use the resources for their individual needs (Hashim and Mokhtar, 2012). The base for individual ability to understand and use information is a qualitative, ongoing learning process. ICT has become a conglomeration of all the technology-based resources and equipment for re-defining information society. Importantly, the new era librarianship comes with competent architectural and software knowledge in order to achieve the quality standards in using or writing web markup languages. Although there are challenges as libraries, especially in the colleges have been facing the problem of poor services, outdated collection of reading materials, financial constraints and inadequate professional staff (Khan and Bhatti, 2012). This acquired skills and sophisticated competencies are needed for new era librarians to manage the Digital Information System (DIS) and Web technologies.

Nevertheless, printed materials will not be phased out completely as they still represent the histories of documented knowledge and local content. It is hoped we can stay focus in this fast changing environment which demands that librarians and information professionals must enshrine in multi-skills, multi-tasking abilities, and competent in areas of work such as management, communication, language, public relations and others. The repackaging of digital initiatives and projects for easy accessibility will create the enthusiasm surrounding the development of the digital library. This study shall be of immense contribution to not just the Librarians and the librarianship profession but to students, lecturers, publishers, vendors, programmers, software designers and the general public. It will provide the needed knowledge of accessing electronic information for teaching, lifelong learning and research (Choi and Rasmussen, 2009, p. 457). The university management will also benefit from the study as it will help them in taking rightful decisions to equip and provide all the necessary tools for digitization of the libraries, including Internet connectivity for online information sharing. The university libraries will further benefit from the study. The status of university libraries in terms of effective digitalization of their library collections and service delivery will be established, and this will give visibility and accessibility to information repositories and the research outputs of lecturers in the universities. The librarians will also benefit from the study. The study will aid the librarians to acquire the current trends and new roles in the new information society. These current will have

bearing in shaping librarians and information professionals in the new information society. Some of these trends are what the world has longed for which are universally accessed and evaluated for effective information service delivery. This research was focused on assessing the digital librarian and librarianship in a new information age.

### CONCEPT OF DIGITAL LIBRARY

Digital Libraries are developed for diverse information society and in different fields which includes education, science, culture, development, health, governance and so on. Kumar and Mohan (2014) stated that digital libraries are quite different from the traditional libraries because they allow users to gain an on-line access to work with the electronic versions of full text documents and their associated images. By way of description, IFLA/UNESCO Manifesto for Digital Libraries (IFLA, 2014) stated inter alia:

A digital library is an online collection of digital objects, of assured quality, that are created or collected and managed according to internationally accepted principles for collection development and made accessible in a coherent and sustainable manner, supported by services necessary to allow users to retrieve and exploit the resources. pp.25

The support of IFLA on digital library encourages both national and international digitization strategies for partnership initiatives. This is because a digital library is never a single entity as it connotes electronics/digital format (Salawu, 2007) at various locations which can be accessed and used with great ease, using information and communication technology (ICT) for the purpose of teaching, learning, research, leisure and decision -making. Thus, a whole range of digitization is allowed to transform original documents and media into electronic formats. These information collections in the digital library employ objects like books, scanned images, graphics, textual and numeric data, digitized films and networked computers with a cable TV's capacity to transmit hundreds of programs. These services are delivered by telecommunications networks, cable TV Networks, the Internet and mobile communication. The important factor here is its ability to provide access for a wide range of services to users or members of the library community irrespective of their locations, thereby, limiting the space, time and geographical locations. Indeed with the Internet and World Wide Web, connections are made, linking several computers with special language called TCP/IP control protocol/Internet Protocol.

Digital library comes with its new approaches to classification and classification to effect the dramatic shifts in intellectual, organization and electronic practices (Shaista et al, 2007). In effect, the digital services in the new era have proved the fifth law of library science which states that library is a growing organism. It has continued to expand to the

predominant mode of access to knowledge and learning, adding values to users and the profession.

### LIBRARIANSHIP

Librarianship refers to an art and sciences of managing libraries. The essential function of librarianship is to make available "information" in its widest sense, serving leisure as well as work needs, for the benefit of people seeking day to day information. Librarianship essentially concerns the problem of storage, retrieval and access to documents, in other words, information. It basically refers to:

- 1. Document collection development.
- 2. Technical processing for the organization of documents.
- 3. Providing reference and bibliographic access to documents.
- 4. Providing physical facilities for reading.
- 5. Handling the different states of knowledge behavior of the users of the library.

Librarianship is, definitely, an occupation, which demands specialized knowledge and skills. Its study is based on a systematic theory which delineates and supports the skills that characterize the profession. It has its professional organizations which promote excellence in the work of the members, influence public sentiment and support and try to raise it to a position of dignity and social standing.

## ROLES OF LIBRARIAN IN A DIGITAL INFORMATION ERA

The emergence of technological ways of disseminating information via the global world-wide access gave name to "digital librarian". Khan and Bhatti (2012) stated that the advent of Internet, World Wide Web and proliferation of online catalogue made the role of librarian to change. Rowland et al (2008) reiterated that they investigate the impact of digital transition on the information behavior of the Google Generation and guide library and information services to anticipate and react to any new or emerging behaviors in the most effective way. He is not only a librarian but has new roles as intermediary, teacher, facilitator, web organizer & designer, researcher, interface designer, knowledge manager/professional, information specialist and sifter of information resources. He functions in all spheres of electronic information services for maximum impact. Other roles required for the digital librarians include:

- 1. Provide universal access and retrieval of digital knowledge, ultimately access to all users,
  - Organize digital knowledge and information,
- 2. Disseminate digital information from the computer held digital information,
- 3. Manage the digital libraries,
- 4. Provide digital references services and electronic information services,

5. Help to handle the tasks of massive digitization, digital storage process and digital preservation,

# DIGITAL INFORMATION SERVICES IN NEW AGE

Literacy has emphasized the importance of new era which is characterized by information. As knowledge is related, it involves other series of literacy which defines the status of populace in the information community. The information and educational setting in the new era integrate the technology literacy, visual literacy, network literacy, information literacy, media literacy (Tyner, 2014 p.6) which are accessed in the digital library through the provision of services of the professional. This era then as Raju (2014) noted needs to reflect a service environment that embraces digitization, electronic publishing, Web 2.0, Web 3.0, Library 2.0, Library 3.0, social media, open access, and a host of other fast evolving ICTs.

The changes in the environment are visible and these affect librarians and information professionals in their roles as service providers. It is their profession and self-image that are being challenged. Their survival and growth depends on their attitude towards turning the new situation to their benefits. Librarians therefore need to find a solution to timely repositioning and role claiming in the new age. Hashim and Mokhtar (2012) pointed out some current trends that have bearing in shaping librarians and information professionals in the new era. They include:

- 1. A vision towards information and knowledge rich society
- 2. Library functions in information and knowledge-based society
- 3. Knowledge-based economy information and knowledge as drivers to boost the economy
- 4. Information management recognized as an important discipline
- 5. Information recognized as commodity (information brokerage, information entrepreneurship, fee-based information)
- 6. Information recognized as power/strength/weapon
- 7. Information strongly link to decision-making, strategic management, competitive advantage, innovation, R&D

### CHALLENGES FACING LIBRARIANS IN DIGITAL INFORMATION ERA

Digital librarians ensure effective and efficient digital information service delivery but they are faced with challenges that hamper the smooth running of these services. The following factors are parts of problems of digital librarians in Nigeria.

Change from old to new: it is not often easy to transform to new order because of the conversance of doing the same thing and being used to it. But librarianship is a serious business (Lankes, Silverstein, and Nicholson, 2007) where the struggle of changing traditional library offerings for new technologies, such as RFID, Maker Spaces, 3D

printers, e-books, databases, information repositories, etc (Willimen, 2014) still affects the competences of digital librarians in the new era.

**Decision making body:** Many administrators, boards and heads of libraries have divergent views on the best practices and benefits of digital libraries. This affects the operations of the digital librarian in the institution. The management meeting never stops which have left some libraries in the middle of nowhere. <u>Uzuegbu</u> and McAlbert (2012) succinctly put it that the university community management has not understood the need for the library to be digitalized let alone encouraging the library to establish open access to knowledge. Kamba (2011) also noted that the lack of policy frameworks at the tertiary level to guide the adoption of this poses great challenges to professionals.

**Funds:** This could easily be one of the greatest challenges of a digital librarian in Nigeria. It all starts from the budget allocation for the digital library. When there is inadequate fund mapped out for maintenance and development, it creates un-seriousness. For instance, money is needed for repairs of damaged facilities, maintenance, training and change of obsolete equipment in the digital libraries as new devices are produced to meet the current needs of effective services. There is no denial of deplorable conditions due to inadequate funding (Ogunsola and Okusaga, 2006). Fund also affects acquisition of regular updating of licensing, ownership and cost of digital resources which is problematic, Gani and Magoi (2015) surmaized. A digital librarian who has no funds to work with performs below average in his institution.

Unused ICT tools in the digital library: Many libraries, especially in the academic sectors have ICT tools conspicuously displayed in the library but they are not being used. Are these ICT tools bundles of confusion? It looks absurd and sounds unethical that in the midst of technological equipment neatly arranged in the full section of the library that they are merely there for the aesthetics of the sector. Why are they not in use? Could it be they are not functional, not connected, purchased on credit, no manual for operation or no competent professional to operate them? In the presence of fully ICT library, many supposed "digital libraries and their digital librarians" still run on 100% traditional information services. It beats the mind.

**Poor Internet Infrastructure:** These include the poor connectivity, non-sustainable services (Okon, 2010) and other enabling factors that hamper the functional operations of the digital librarian in his library. This causes inadequate utilization of electronic resources such as the electronic journals and online databases which are essential for learning and research. How can scholarship be supported with research and lifelong learning without global appropriate technologies usability (Fabunmi, 2009)? The digital librarian with poor internet infrastructure in Nigeria, especially in tertiary institutions

cannot efficiently create spaces for sharing of research work with the universal community. For computer operation and steady internet accessibility, power must be on but Nigeria has the greatest erratic power supply which throw the digital librarian is in dilemma. Fatunde (2008) stated inter alia:

Only a trickle of daily electricity production dribbles erratically into the country's 93 institutions, rendering ICT systems dysfunctional. Universities resort to diesel-propelled generators, but they are expensive and environmentally unfriendly. pp. 30

Lack of Keeping to Standards: This is evidenced in many Nigerian academic libraries as the uniform standard of digital library services is not very clear. It is in this view that Gani and Magoi (2014) noted that Northwest Universities are finding it difficult to cope with the standards existing in other parts of the world.

*Updating skill:* Capacity building is not "a one off" exercise. Arguably, the level of ICT proficiency in Nigeria is low with the staff development efforts in this direction lacking which has affected the advocacy of digitalization and open access to knowledge (<u>Uzuegbu</u> and McAlbert, 2012). Everybody is waiting for the institution to sponsor his trainings, otherwise, he sits back and goes with the title without living up to it. Without training and re-training of a digital librarian, he cannot be competent in Web technology skills, hosting locally digitized materials, maintaining proxy access to restricted resources and other digital service resources (Fabunmi, 2009). Again, many of them lack knowledge of components and technological tools for effective implementation (Inyiama and Asogwa 2012).

Poor Knowledge of Digital Library Services by the University Community: Many digital librarians have not created the awareness of their digital services to the members of the communities they serve. Is it any wonder that the community lack of knowledge of the existence of open access journals in the various fields or discipline they are in need of. According to <u>Uzuegbu</u> and McAlbert (2012) most academic staff and members of some disciplines are not aware of the existence of a greater number of free online journals available to them in their various fields or disciplines. They reported in their studies that in Umudike, the institution has a very low level of access and usage of the free online journals available to the institution.

## THE WAY FORWARD

The provision of good digital library services through well streamlined digital platforms will place the digital librarians, libraries, users and our profession at par with other academic scholarship evaluations. Today, many Nigerian academic libraries are

poised for enhanced services through quality education and research development. Therefore, to sustain this, a lot of factors should be ensured.

**Learning and Re-Learning:** No one knows it all which is the reason learning is a continuous exercise. Librarians must engage in regular trainings and re-trainings, because once one stops learning, the person is dead intellectually. Does a professional ever stop learning? No! Attendance and active participation of digital librarians in conferences, seminars and workshops will keep them on top with new knowledge of serving the users satisfactorily.

**Conversion and Digitization of Local Content:** There are lots of local contents from knowledge created in the communities we serve. These should be converted for dissemination, easy sharing and universal access.

Information Sharing: Digital librarians should share experiences and learn from others. This is one of the best practices of 21<sup>st</sup> century professionals. When information is shared, knowledge is learned, improvement is gained and service delivery is enhanced. Information sharing can lead to software sources, open access electronic resources, useful databases and other super information of virtual library services. It also integrates collaborations and partnership across librarians locally and internationally. Collaboration comes in with participation and involvement of attracting funding agencies to upgrade and establish library development with necessary information infrastructures.

Space Creation for Maker spaces and other Activities: A digital librarian must convert the excess spaces in the digital libraries for interesting programs that will attract students and staff to the library. Many academic libraries are filled with halls and rooms that are empty without any special program mapped out for them. Planning and initiating makerspaces, advertising spaces for special programs from the faculties, department or any group will create visibility to the library and re-define the values of a digital libraries and librarians.

Advocacy and Sustainable Relationship with the Board: If digital librarians must perform adequately in their digital information services in their institution, they should adopt measures to be accepted by the decision making bodies. They must re-strategize and adopt advocacy tools so that allocation of budget will be appropriately and proportionately mapped out for library development.

## **CONCLUSION**

Libraries and librarianship have come a long way, surviving many generations to functionally exist in the new age. The case of digital information service has provided unique formats of digital reference services, electronic information services, navigating, searching and retrieval of digitized information through Web documents from the global digital Library. The specialized librarians know that serious shifts have been made and followed up with intense learning and re-learning in order to remain relevance and serve the users appropriately. The challenges are surmountable and different strategies have been adopted to limit them as they are part of changing nature. Librarianship has come to say and the professionals are doing everything to ensure that.

Digital Librarians as professional trained in acquisition, organization, retrieval and dissemination of information need to adapt and acquire new skills of digital age. Virtual library is not the ultimate answer to everyone's information needs, rather merely another step in a dynamic and evolutionary process. The traditional print library and traditional library services will not disappear. But, as librarians, we must accept and adapt to the introduction of new techniques and systems. We must recognize the enormous potential of the virtual library, address the issues involved in its creation, and take a leadership role in integrating these new systems and services into our libraries, for our own good and for the good of our users.

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