Understanding the 21st-century library users to enhance service delivery in Nigeria academic libraries

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Abstract

This paper explores the library environment where twenty-first-century users (new users) are expected. The skill set of the new users includes critical thinking, communication skills, creativity, problem-solving, perseverance, collaboration, information literacy, technology and digital literacy skills, media literacy, global awareness, self-direction, social skills, literacy skills, civic literacy, social responsibility, and innovation skills. The library users of the 21st century, Nigeria, expect to meet an equally modern library environment comparable to what exists in information societies where electronic resources are sufficiently available. The objective of the paper is to understand the new users and how best to be served by academic libraries in Nigeria. The paper identifies a major concern of non-readiness on the part of academic libraries thus discouraging 21st-century users. It concludes that today's users are technology savvy and can only be satisfied with automated library services, and user-friendly space with technology-driven library staff. The paper relies on theoretical analysis as a methodology and recommends that library stakeholders should understand the peculiar nature of the new users and improve the funding pattern of libraries to provide all necessary resources and facilities to attract and sustain the patronage of 21st-century library users.

Keywords: Academic libraries, 21st century, new users, information infrastructure, information society, e-resources

Introduction

Information consumers, library users or patrons, as they are often referred to, are the determinants of the holdings of the library, opening hours and services, human resources, and most important collection development policies. In other words, the users of the library will determine, to a large extent, how and what the library will stock as information resources. There had been users in the monasteries (Holmner, 2011), during Johannes Gutenberg's printing discovery (Mwantimwa, Elia, and Ndenje-Sicwhale, 2017), in Ranganathan's description of library services (1931) and currently, the technology-driven twenty-first-century library environment (Mawere and Sai, 2018). Today's library users (new users), as described by Prensky (2001), are 'digital natives' and by Nicholas (2014) as 'Google generation' who prefer resources to be in their electronic formats because they possess the requisite skills to access such resources effectively. The users in mind, therefore, are persons who possess twenty-first-century skills such as critical thinking, communication skills, creativity, problem-solving, perseverance, collaboration, information literacy, technology and digital literacy skills, media literacy, global awareness, self-direction, social skills, literacy skills, civic literacy, social responsibility, innovation skills (Stauffer, 2020). These skills become relevant because the library environment has evolved and metamorphosed into a digital world of resources prevalent in an information society.

In the opinion of Mutula and Moahi (2008), information societies are communities where the creation, distribution, use, manipulation and storage of information have become cultural and economic. People's way of life and career is dependent on how information is curated, used or stored. Further description of an information society is the amount of data available from transactions in trade, health, education, aviation, tourism, sports, and all walks of life (Stauffer, 2020). It is worthy of note that a key characteristic of an information society is that information has become a key economic resource that the citizens use and consume in nearly every aspect of their lives and there is an existing infrastructure to facilitate such routine and economy. To put it simply, it is the modern world but in the opinion of Duff (2015) the term information society has taken over from industrial society as he queried that 'at what point did industrial society metamorphose into information society?' According to Duff (2015), a nation becomes an information society when over half of its labour force can be credibly designated as information workers, and this point has already been reached by western nations such as the United States of

America, the United Kingdom, Switzerland, Germany to mention but a few. So, library users who are ready to access electronic resources in libraries and databases in western nations must possess the relevant skills to achieve this. The modern library users, irrespective of the geographical location, share the same characteristics globally and one of which is their understanding and capabilities within a digital information infrastructure.

Information infrastructure

Library and Information Science (LIS) seems to have ceded academic discourse on 'Information infrastructure' to fields of knowledge such as systems engineering, computer science or computer architecture. This development has only reduced the terms to technical engineering terms with more focus on the 'designing and standardization' of information infrastructure with little or no library and information science inclination (Graham, 2019). However, the need for LIS to forage into 'information infrastructure' to achieve effective service delivery for library and information consumers is emerging. This emerging need is precipitated by the various converging technologies that underpin access to digital resources to locate information, including the internet and online databases (Mutula, 2013). Today's library user wants to watch a video of how an experiment is carried out synchronously, simply read an e-book from the Online Library database or better still, 'immerse' himself in the carrels while working with archived digital resources. This kind of library patron, the twenty-first-century information users, can only be served adequately when libraries are concerned and provide technologies that guarantee access to information.

The term 'information infrastructure' was traced by Mutula and Moahi (2008) to have originated in 1970, in the literature that was about or related to the information society. The terms were part of the elements that characterise, shape and support an information society. They concluded that: the revolution in PC technology of the 1970s and 1980s and the internet and the Web revolution of the 1990s and beyond must have given great impetus to the evolution of the concept of the information society, as it is known today.

One may infer from the duo that the technologies that make information society work as expected are the information infrastructure and that one cannot discuss information infrastructure without discussing the information society. Put differently, a broad discussion of information society would have taken care of issues surrounding information infrastructure. In describing the requirements to participate in an information society, Lor and Britz (2007) argued that access to

relevant information can only be achieved within an environment of well-developed and well-maintained information infrastructure. This position further calls attention to examining what makes a viable information society.

Information society

Knowledge society, information environment or Information society, have been concepts describing the same experience in today's life where every aspect of human endeavours has been revolutionized with ICT thus very little consensus on definitions has been achieved (Rohrbach 2007). Every facet of human endeavour: aviation, weather forecasting, medical diagnosis, agriculture, education, transports management, sports and entertainment administration to mention but a few have felt the new dawn. Many of the existing definitions are deficient in their conceptualization, thus making it difficult to decide whether countries have become information societies or they are still moving towards the status (Hamid and Zaman, 2008). One of such descriptions of the information society was by McKenzie (cited in Omekwu, 2006) who describes an information society as Seamless, transparent, and virtual reality: a global network or matrix of digital data, information and knowledge banks warehouses, refineries, archives and repositories; broadband expressway for transporting multimedia in bit and bytes to end users in distributed environments; artificial intelligence, expert systems, hypertext, gophers, client servers, Wide Area Information Servers (WAIS servers) to navigate cyberspace in time delivery to a universal scholarly workstation: independent from time and space constraints; gateways, doorways, windows and intelligent switches and links. Fifteen years after Mckenzie's description, Holmner ((cited in Holmner (2011) observed that the criteria underpinning the description were in favour of developed countries and wondered when developing countries would achieve the information society status going by their prevailing circumstances. Holmner (2011) further suggested a more appropriate description that accommodates the challenges in developing countries: A society that is reliant upon a sophisticated physical and ICT infrastructure for the improvement of everyday living and working conditions. A society that values the importance of information as a key to economic wealth and prosperity and where there is an increase in information-related activities, as well as an enhancement of human intellectual capability. The information and knowledge society ensures the freedom of information through the use of information and communication technologies. In such a society, modern information and communication technologies are utilised to achieve the interaction and exchange between their local knowledge systems (tacit knowledge

and explicit knowledge) and the global knowledge system (explicit knowledge) to create usable, relevant contextualised content and knowledge. This interaction and exchange of data, information and knowledge will, in turn, ensure the respect of other people's beliefs, values, norms and religions due to the increase, and availability, of information regarding these aspects.

Some of the high points of Holmner's description have been 'everyday living', 'ICT physical infrastructure' and 'people's local knowledge systems which are the bane of the challenges in developing countries. Considering these challenges, Holmner (2011, 140) put it succinctly that "developing countries are still in the grip of a digital divide and are faced with numerous barriers such as extreme poverty, inadequate physical infrastructure, and shortage in human intellectual capacity, to mention a few". Long before Holmner's observation, these challenges were also noticed by the whole world; a development which prompted a world summit to create a space for dialogue on issues such as infrastructure, access, capacity building, trust and security, enabling environment, ICT applications, cultural and linguistic diversity, and ethical dimensions of the information society, with all their implications and challenges (WSIS, 2004). The agenda of the summit was pursued and a Declaration of Principles (WSIS, 2006) was to make every place in the world an information society by 2015 through the ICT targets: connect villages with ICTs and establish community access points; connect universities, colleges, secondary schools and primary schools with ICTs; connect health centres and hospitals with ICTs; connect all local and central government departments and establish websites and emails addresses; adapt all primary and secondary curricular to meet the challenges of the information society; ensure that all of the world's population have access to television and radio services; encourage the development of content and put in place technical conditions, in order to facilitate the presence and use of all languages on the internet; ensure that more than half of the world's inhabitants have access to ICTs within their reach (WSIS 2006).

Placing Mckenzie's conception of information society against the background of the Declaration of Principles at WSIS and coupled with the insight that was shared by Homer, one is tempted to conclude that most developing countries cannot be considered to be of information society status because the reality in some communities is that few years after the expiration of the target year of 2015, some of them do not have adequate electricity (Jinadu& Kiran, 2014, Mawere& Sai, 2018) which is a critical ingredient in the realisation of the information society. Even where an alternative to electricity such as diesel-powered electricity generators have been acquired, most

universities and colleges, the epitome of research and development (R&D) are not connected with ICTs or the internet to support scholarship (Academic Staff Union of Universities (ASUU), 2013). What about human capital development? All these issues as identified in the Declaration of Principles are critical to the realisation of an information society where libraries and information centres are expected to bridge the gap between knowledge and ignorance. In some communities, as reported by Omobowale, Omobowale and Akinade (2013, Daily Post, 2020), newspaper stands provide readers with an avenue to interact and create meaningful values which engender social consciousness. It is indeed an alternative avenue, which has come forth due to the deplorable socio-economic conditions in the country. As readers find it difficult to afford the purchase of newspapers daily, they opt for the alternative of renting at a minimal cost in order to gain access to current news reported in newspapers.

This community, therefore, cannot be said to be an information society envisaged by WSIS and would further underscore the fact that the digital divide observed and described by Sam (2005) is still a barrier to effective information access in developing countries such as Nigeria, which according to Baro and Asaba (2010), "is not yet an ICT country in Africa". Though the ITU (2013) report showed an increase in mobile telephony in Nigeria, this has not translated to specific ICT applications in daily academic transactions as 28% of Nigerians use the internet while a country like the US has 78% internet users (ITU 2013). One wonders how to close this 'divide' and hopes the status of an information society where the physical infrastructure to deploy and assure adequate access to information would not continue to be a dream for developing countries where everyday living, poverty and education have remained critical barriers.

Efficient service delivery to the 21st-century library user

The twenty-first-century library user, as earlier described, has skills that the library is expected to explore. These users are in high spirits and constantly sharing ideas with other learners from other countries via their Smartphones thus making them ahead of their peers in the community; if not the library staff. This library user in question is in a hurry to access multimedia resources and has a large appetite for animations, games, pictures and videos on almost every aspect of life. In the opinion of Appleton (2017), for these users to appreciate library services or be attracted to the library, the library must pass the 'performance test' using the Key Performance Indicators (KPI). One major expectation of the 'new' library user is the Collection spanning electronic resources,

traditional paper-based resources, online or desktop databases, and institutional repositories, to mention but a few. Appleton says the collection must be current, user-friendly, available in multimedia formats, and growing. The currency of the collection reflects trends and community initiatives, especially where the inputs of the users were sought during the selection process. Also, about the collection, apart from a sufficient coverage of all information needs and recreation development of the patrons, today's users will be attracted to the library if the resources are accessible remotely and in multimedia formats.

In the opinion of Mwantimwa, Elia & Ndenje-Sichalwe (2017), Library service delivery will be considered efficient when the users experience optimum satisfaction with available facilities. Some of the items to consider as facilities include equitable distribution of carrels, high-speed internet connectivity, conducive studying and workshop space, regularly updated reading lists across disciplines, and helplines for users, to mention but a few. To Mwantimwa et al, the 21st-century library user's consideration for the facilities bothers on things that will guarantee him comfort such as space to share or discuss with colleagues. One could infer therefore that these users may prefer the easy chairs instead of the Desk-bound reading chairs. For being the 'Smart phone' generation, the 21st-century library users prefer to sit in easy chairs with their Smartphones, tablets or any other PDAs and continue to surf the internet. So, if such a sitting arrangement is added to the identified facilities by Mwantimwa, the users may consider the facilities satisfying.

The modern or new library user requires a librarian and library staff whom Gwyer (2018) describes as a human resource that has ten (10) skills: Change management, proven value, influencing and negotiation, creativity and innovation, supporting research in a digital world, digital literacy, marketing, digital information management, developing and managing space, and lastly collaboration. Gwyer explained all these skills in detail, but the summary stands that every librarian or library staff should be ready to work and interact with 21st-century users. If the library system does not understand the modern and skilled user, there will be a disconnection; the users will not see the value in libraries while the investment in libraries will add little to the scholarship, research and socio-cultural development of the citizenry. There will exist a mismatch to have, for instance, a library user who does not know how to use a card catalogue because he grew up in an information society where resources are identified using search engines or database queries. So, as

much as we understand the 21st-century user and his capabilities, the library system and the library staff, particularly the librarians should be retrained to fit and perform well in the new skill demand.

The 21st-century user and electronic resources in academic libraries in Nigeria

Special attention, peculiarities, and characteristics of the 21st-century users (new users) have been reported by several scholars (Dadzie, 2009, Nicholas, 2010, Gwyer, 2018) and summarized by the technology age into which they were born. They grew up to see electricity, electronic machines and equipment, computers and computerised home appliances and put in a little effort to learn how to operate them. In terms of age range, these are users born in the millennium; the year 2000 and beyond. In the library domain, however, library users of these categories and skills are not likely to enjoy the environment. After using smartphones, remote-controlled television sets and electronic machines, the 21st-century user walks into some academic libraries and discovers that most operations are still in the traditional manual mode. Most academic libraries, especially publicly owned ones, have very few resources that are in electronic forms. This observation was further supported by the inability of most academic libraries in Nigeria to provide services during the lockdown occasioned by the COVID-19 Pandemic between December 2019 and October 2020. In addition, Researchers (Gerolimas & Konsta, 2008; Ezeama, Ugwanyi & Ugwu, 2014; Jubril, Sabitu, Jamila & Liman, 2018; Daily Post, 2020) have observed that there are more academic libraries without adequate electronic resources in Nigeria. This makes it difficult for the 21st-century user to enjoy his library experience chiefly because the environment, resources and library staff are working in the 'old school. While the clamour for electronic resources in academic resources resonates, it is equally important to pay attention to the users' environment and library staff in order to have a balanced learning environment. The 'Google generation' has almost everything on the palm (Smartphone) but the library with the appropriate human and material resources will better serve the 21st-century library users, especially in identifying and processing quality information.

Conclusion

The new users or twenty-first-century library patrons were born into the world that is now driven by technology, from mechanized farming to domestic cleaning, from medicine to aviation. Every aspect of daily life is almost incomplete without the use of technology. In learning and

librarianship, all the operations have been taken over by technology. However, users who possess all the 'new' skills to operate within the modern library should be supported in order to maximize their library experience. Academic libraries in Nigeria should understand the peculiarities of the new users, their information needs and perceptions in order to attract and sustain their patronage. In addition, academic libraries should provide spaces and an engaging environment where the new users will get optimum satisfaction in the resources.

Recommendations

1. Academic libraries should establish regular information literacy sessions that will prepare users with sufficient digital literacy skills to access the electronic resources of the libraries.
2. Libraries should establish 'consultation clinics' where an individual user can have personalised discussions with a librarian to resolve issues bothering on their limitations in digital skills and computer literacy.
3. Upon understanding the needs of the new users, the Library requires all stakeholders to assist in improving the funding pattern that can increase budget allocation to academic libraries; and
4. Librarians should make out time to understand that the optimum library service delivery can only be achieved and measured from the viewpoint of 21st-century users. What resources they (users) need and how best they prefer to access them should drive the provision of services in academic libraries in Nigeria. These users are the customers, patrons and clients. They are the king in the kingdom of service provision. So, every academic library system should reflect this understanding and make conscious and concerted efforts to satisfy their 21st-century library users. It is such understanding that will drive the collection development, training of librarians and other staff, architectural re-designing of the library environment and lastly, and most importantly, the budgetary allocation to academic libraries.

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