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DIGITAL ENVIRONMENT AND SOCIAL EXCLUSION IN NIGERIA: ROLES OF LIBRARIES AND OTHER INFORMATION SERVICE PROVIDING INSTITUTIONS

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ABSTRACT

Social exclusion is more or less a deliberate act of negligence, wherefore group of people in society are disengaged from mainstream culture because of their background, geographical location and other demographical characteristics that demarcate them from others. Social exclusion is an omnibus term, which encompasses many multidimensional social variables such as inequalities of opportunity, lack of access to basic amenities, digital divide and many more. However, for the sake of this current study, emphasis would be on digital divide existing between urban and rural settlers, in respect of their accessibility to information in today digital age. This study is a literature review that sought to enumerate the roles of information providing institutions in curbing and integrating the digital divides. Observation from the literature underscored poor information infrastructure in the rural area as the major causes of the digital divide between them and the urban area. Another impediment was because the vast majority of rural settlers are low-income earner and most are not literate, therefore, they are poverty driven and access to internet connectivity become luxury rather than a necessity of life. The aforementioned impediments necessitate the need for information providing institutions such as the libraries, information centers, archival institutions, museums, and others to shift focus from just being a knowledge storehouse to more of a learning center for information literacy.

Keywords: Digital Environment, Social Exclusion, Digital Divide, Information Centers, Libraries, Rural Area, Urban Area, Nigeria.

INTRODUCTION

The era of digitization provides a dizzying array of tools that proffer opportunities for information centers all over the world to become more vibrant and accessible. This revolution provides the means to share vital information, enabling people to learn more, shape informed opinions, and make decisions in their daily lives (Clough, 2013). Since the application of Information and Communication Technology (ICT) to almost all the spheres of life is no more a new phenomenon in the 21st century, therefore, there has been a tremendous change to the world of information services. This change had affected the library, museum, and archives in many ways, which brought about the digital environment. Libraries, archives, information centers, and museums both in developed and developing countries are shifting from their isolated past and moving into integrated systems and networked operations. In support of this statement, Surulinathi and Balasubramani (nd) opined that libraries, museum, and archive are changing in terms of their collection, facilities, and services due to the constantly changing scenario of information services that was orchestrated by information technology. As these information centers are operating in digital environments, they are now more than a storehouse of knowledge but also now act as learning centers.

The issue of social exclusion on the other hand had also brought concern for information centers (i.e. libraries, museums and archives) on how they can help to curb the quandary. The concept of social exclusion was introduced by the social policy think-tanks of the European Union's Commission and adopted by the United Nation's International Labour Office (Durrani, 2005). Castells (1998, p.73) describes social exclusion as "*the process by which certain individuals and groups are systematically barred from access to positions that would enable them to an autonomous livelihood within the social standards framed by institutions and values in a given*

context. This means that social exclusion disenfranchises a person as labor in the context of capitalism." In other words, social exclusion can be described as a process by which certain groups are systematically disadvantaged because they are discriminated against on the basis of their ethnicity, race, religion, sexual orientation, caste, descent, gender, age, disability, HIV status, migrant status or where they live" (Reducing Poverty by Tackling Exclusion, DFID, 2005).

The roles of library, museum and archives are interwoven in terms of their selection, acquisition, organization, preservation and dissemination of information resources, all of which are usually done manually. It is on the mode of their operation that people refer to them as information storehouse. However, in the digital age, information professionals in these information centers are no longer referred to as the keepers of books, this is as a result of the advent of information technology where information is electronically stored and retrieved. The instantaneous access to information through the internet has made access to vast amounts of information and data available to anyone with a computer and internet connectivity. The libraries, (most especially academic libraries) apart from provision of traditional services in a computerized environment is also acting as a learning center by providing support for teaching, learning, and research. Furthermore, in a digital environment, the modern trends in libraries, museums and archives include; conversion of card catalogue to OPAC-Web OPAC-Multi Web OPAC-World Cat; Reference Services to online Reference Services (online dictionary, online Encyclopedia, online Year Books); Circulation-Online reservation, Issues and Return- RFID Technology; Portal or Subject Gateways among others. In the same vein, the information centers most especially libraries have made available "infosuss" i.e. a simple information literacy tutorial on its website, which is quite useful for a new user in making use of the library and its resources (Surulinathi & Balasubramani (nd)). Clough (2013) also postulated that libraries, museum, archives and other information providing institutions

were among the early adopters of digital technology, they are very quick to embrace and integrated both digitization and social networking tools in their operations.

Globally, social exclusion is not a new phenomenon most especially in developed countries such as the UK, Canada, among others. Dovetailing social exclusion down to what is obtainable in Nigeria was the disparities between urban and rural areas (Ifijeh, Iwu-James & Adebayo, 2016). In consonance to that, Trading Economics Rural Population in Nigeria (2014) reported that rural areas in Nigeria constitute about sixty percent of the country's habitable land space. These parts of the country are adjudged economically underdeveloped, as they are plagued with poor infrastructure hence the continuous migration of persons in the productive age bracket from rural to urban areas in Nigeria. Just in apposition to foregoing, Kuboye, Alese and Imasuen (2012) explained that in term of the advantages that ICT offers, those who are on the disadvantaged side of the digital divide would remain digitally excluded and underdeveloped and their level of information illiteracy in the rural areas would be alarmingly high. On the other hand, apart from the lack of information literacy skills, most people in these communities are low-income earners and as such, the provision of ICT facilities remains a luxury. Ibikunle and Jakpa (2013) reported that internet access in rural communities in Nigeria is poor and almost nonexistent in some area. The household survey of 2011 as reported by Dean (2014) shows that 84% of urban dwellers have access to mobile phones while only 58.5% of rural dwellers have access to mobile phones. Furthermore, the result shows that most owners of mobile phones in rural areas use them for making calls, rather than for accessing the internet to interact and search for important information. Correa and Pavez (2011) supported this when they observed that in the rural communities, telecommunications infrastructure is not readily available, there is absent of electricity and reluctance on the part of

internet services providers (ISPS), cybercafé operators and other stakeholders to extend their internet services to the rural areas.

In developed countries, greater attention were given to potential of Information and Communication Technology (ICT) in aiding Libraries, Museum and Archives in a digital environment to tackle social exclusion. Dutch and Muddiman (2000) opined that an Information Society (IS) is a key goal of today knowledge driven society, and that information professionals has not been slow in extolling their role as agent of transformation to assume a new roles to ensure they bridge the yearning gap between the divide between rural and urban centers. Therefore, it is on this solid ground that this study examine the changing roles of libraries, archives, museums and other information providing institutions in curbing the issue of the social exclusion between the rural settlers and the urban dwellers.

Objectives of the Study

The general objective of this study is to describe the changing roles of libraries, archives, museum and other information providing institution in the digital environment and to highlights the critical issues of the social exclusion in Nigeria. Therefore, the paper will specifically:

1. Describe the digital environment for information infrastructure institutions in Nigeria
2. Identify the new roles of Nigerian libraries, archives, and museums in the digital environment
3. Highlight the reality of social exclusion in Nigeria
4. Frame the new roles of libraries, archives, and museums in tackling social exclusion in Nigeria.

REVIEW OF RELATED LITERATURE

Digital Environment for Information Providing Institutions

Conceptually, a library is an organized collection of sources of information and similar resources, made accessible to a defined community for reference or borrowing (Edeama, 2015). It includes other sources like reference materials, books relating to the school curriculum, general books not relating to a specific subject area, periodicals, newspapers, audiovisual materials, government publications and electronically stored and retrievable materials. In other words, a library is a place in which literary and artistic materials, such as books, periodicals, newspapers, pamphlets, prints, records, and tapes are kept for reading, reference or lending (Yusuf, 2014).

Museum on the other hand, is an institution that cares for or conserves a collection of artifacts and other objects of artistic, cultural, historical, or scientific importance and some public information. Museums make them available for public viewing through exhibits that may be permanent or temporary. The purpose of modern museums is to collect, preserve, interpret, and display items of artistic, cultural, or scientific significance for the education of the public. An archive is an accumulation of historical or legal records, or it is the physical place they are stored. An archive is a social institution that contains primary source documents that have accumulated over the course of an individual or organization's lifetime. Archival records are kept to show the function of that person or organization. They are records that are been generated naturally as a product of regular legal, commercial, administrative, or social activities in an organization. Traditionally, all these information centers (library, museum, and archives) performed their operation manually in term of their collection (printed materials), organization (card cataloging), preservation and dissemination of their information resources to their patrons.

However, the advent of Information and Communication Technology (ICT) give birth to the digital environment, which reshape operation operands of information providing institutions. Shepherd (2004) defined a digital environment as an environment characterized by technology, which increases the speed and breadth of knowledge turnover of the society. The digital environment fostered the expansion of access to information centers through collaboration, and interlinking of resources. In support of this statement, Fabunmi (2006) identified three major reasons for digitization endeavor, which include the need to preserve endangered library resources, improvement of the efficiency of information search mechanism and improving access to library resources. Clough (2013) postulated that the digital revolution offers museums, archives, and libraries a golden age of opportunity because they are ideally suited for a world in which learning is informal and centered on inspiration and self-motivation. Of course, online access to digitized documents and images from their collections opens the doors of these institutions to a much wider audience. Digitization also offers museums, archives, and libraries striking new avenues to engage with those who use their services and to become fuller partners in formal and informal education programs.

Furthermore, the Dutch Electronic Library Technology Association (DELTA) as cited by Irechukwu (2007) enumerated some benefits of digital environments as follows:

1. Integrated access to electronic resources via web browsers.
2. Using one point of access sometimes called one-stop shopping;
3. A range of new functionality such as improved subject access production facilities for authors,
4. multi-media support and many others;
5. Personalized off-line selection of information, based on profiling;

6. one account and billing mechanism for all services and extensive online help and training modules;
7. It offers platform for cooperation in the area of selection of relevant documents;
8. It will eliminate duplicate efforts and solve problems of different locations simultaneously;
9. It brings integration in existing local and national infrastructures;
10. It establishes data warehouse with information on end-user behavior.

In the digital environment, the following are the core capabilities and skills for the information professionals working in the libraries, museums and archives as enumerated by (Summerland et al, 2004).

1. Advanced skills in information location and retrieval;
2. Familiarization with databases of different types;
3. Local ICT problem-solving and troubleshooting;
4. Keeping up with latest information technology;
5. Understanding the scale and structure of the internet;
6. Organize, present and authenticate information for users;
7. Assessing the utility of information for a particular purpose;
8. Tailoring retrieval strategies and information to the needs, interests and preferences of individual users (mass customization);
9. Customer service skills and associated questions of interpersonal behavior;
10. Create links between the information service and related delivery and support systems (requiring knowledge of different service providers and social /organizational infrastructure);

11. Designing databases for identifying, collecting, organizing and disseminating relevant documents;
12. Training and facilitating, helping people of any age, background, specialism or need to use information resources and transact services.

New Roles of Libraries, Archives, Museums and other Information Providing Institutions in the Digital Environment

Advancement in Information and Communication Technology (ICT), Orchestrated by options of sources, format of information and several ways of floating information has a great impact on roles of information professionals working in the libraries, museums, and archives. Salisu (2002) postulated that Information and Communication Technology (ICT) has engendered a new approach to work and service delivery, and is a technological development that has changed work and job expectations. Libraries, museums, and archives are one of the main areas deeply affected by advancement of information technology, which serve as the backbone of today information age. This is because these information centers being the mainstay of information and knowledge are going digital/virtual such that information services extend beyond walls and physical buildings. For example, Clough (2013) affirmed that museums are also building technology into physical spaces to expedite learning. For instance, the nation's science museums are improving virtual field trips by adding interactive components that let presenters talk to students in real time. They employ data visualization methods and interactive tools that allow visitors to explore "what if" scenarios. Cloud technology offers the next quantum leap, helping museums upload their collections and records and enabling visitors to connect to an infinite variety of sources.

Information professionals are coerced to change the way they are functioning in meeting the information need of their users. This means that the advent of Information and Communication Technology and digital transformation has changed the face of information profession from mere information custodian to one who is expected to electronically or digitally create, process, store, manipulate and disseminate huge volumes of digital information. The changing role requires different personalities of information professionals as well as different skills and knowledge. The focus is on power to draw together different forms of communication, smoothly integrating them within a digital environment and providing access to the stored information with the use of Information Technology tools and services. The information professionals in libraries, museums, and archives will become agents of integration, linking users with avalanche of digital information. Buttressing the foregoing, Surulinathi and Balasubramani (nd) postulated that, in the digital environment, information professionals need to improve their competencies on new technologies to deliver high-quality information services to users.

Bharathi (2012) identified new role of information professionals in today knowledge society, such roles include global information provider; as resource manager; as knowledge creator; as preserver; as navigator; as communicator; as financial manager; as time managers; as legal advisor; as personnel manager; as technology prospectors; as mentor; as leader. In congruence to the aforementioned, Itsekor and James (2012) postulated that information providing institutions are faced with evolving technological advancement of 21st Century, which usher in globalization, and digitization of information. These have led to automation of operation routines, digitization of resources, virtual conference, webcast, podcast, e learning, Web 2.0/Library 2.0. Information providing institutions are faced with daunting challenge of developing the information centers with infrastructure and upgrading of staff skills to meet present user expectations.

Information users are getting used to acquiring information devoid of the traditional library, museum and archive domain of old. In the digital environment, information professional contributes to the development of human capacities for national and international progressive societies.

The table below gives the summary of the new roles of the libraries, museums and archives in the digital environments according to Verma (2015)

From Traditional Service	To Digitized Services
Information resource in one medium	Information resource in multi-media
Library, museums and archives has its own collection	Library, museums and archives without way
Procurement of information sources by individual information centers	Procurement of information resources through consortia
Service in good time	Service just in time
In-sourcing of all activities	Out-sourcing of all activities
Local reach of resources	Global reach of resources through networks
User's want print resources	Users want print, non-print, online resources
Users goes to information centers	Information centers come to users
Local users	Users from any place

Global View of Social Exclusion

The concept of social exclusion has emerged relatively in discussions about digital advancement. Unfortunately, ICT has become a basis for disparity among nations; this disparity has been termed as digital divide (Fizz 2011). According to Duffy's definition of Social Exclusion as cited by King (1999), defined social exclusion as the inability of individuals to participate effectively in economic, social, political and cultural life, alienation and distance from the mainstream society. In the same vein, King (1999) in his own word, described social exclusion as a *"highly dynamic and complex notion which explains not just how many people are poor, but what poverty actually is, and how it fits into the larger social, economic and political makeup of a given locality."* In order words, Social exclusion can be described as a process by which certain groups

are systematically disadvantaged because they are discriminated against on the basis of their ethnicity, race, religion, sexual orientation, caste, descent, gender, age, disability, HIV status, migrant status or where they live" (Reducing Poverty by Tackling Exclusion, DFID, 2005).

Globally, research had shown that the issue of social exclusion is not a new phenomenon (King, 1999), for example, Ghazi (1999) as cited by Durrani (2005) reported that people's struggle is primarily wage around satisfying basic material needs for survival (such as food, clothing, and shelter). The seriousness of exclusion facing a large part of world's population is shown in the fact that half of the world's population lack basic sanitation services, while more than one billion people lack access to drinking water and in some of the developing world the figure are intensified. According to Duranni (2005), he reported that entire countries and regions are deprive, for example, Sub-Saharan Africa with its 500 million people. The reason for this exclusion was enumerate in the context of the development and expansion of capitalism worldwide. This assertion is supported by Castells (1998, p.74) where he says that the regions, Sub-Saharan Africans are excluded because they are "non-valuable from the perspective of informational capitalism. Furtherance to that, they do not have significant political wherewithal for the world powers and so they are deprived of the basic flows of wealth and information, and ultimately deprived of the basic technological infrastructure that allows free flow of information, communication, innovation in today's world of affluence.

The Reality of Social Exclusion in Nigeria

In Nigeria, the devastating picture of social exclusion can be termed as the gulf between rich and poor. Yet, this poverty gap shows little sign of reduction, and issues of class, race, gender, health, and geography compound the many forms of social exclusion prevailing in Nigeria society. Lack of financial support constitute the most obvious cause of social exclusion which links to all

other factors such as lack of basic amenities, information technology infrastructure, employment opportunities and so on. Kabeer (2000) postulated that the hard core of social exclusion occurs when principles of unequal access in different institutional domains reinforce, rather than offset, each other, creating situations of radical disadvantage. He explained further that, poverty is widespread in sub-Saharan Africa, variations within poor communities in the capacity to work, vulnerability, and access to social networks create considerable differentiation, with some groups more disadvantaged than other.

Gore (1994) description interlocking array of social exclusions faced by resource-poor Hausa households in Nigeria thus:

1. Poor men applied less manure to their farms and obtained lower yields per unit of effort;
2. Poor men were those who sold their grain immediately after harvest when prices were lowest;
3. Poor men had unremunerated types of non-farming occupations;
4. Poor men often had 'no time to farm' their granaries being empty soon after harvest, they were obliged to pick up a living from day-to-day by working in odd jobs for others or by collective 'free goods' such as grass or firewood;
5. Poor men (being farm sellers) often owned insufficient manured farmland to get their sons to work;
6. Poor men could seldom borrow money, being considered bad risks".

Intel Corporation (2007) postulated that language barrier/illiterate is also one of the factors that socially exclude Nigerian. According to them, they reported that 56.9% of Nigerians are not literate. They explained further that, though the Nigerian government has made efforts to bridge

the literacy gap by embarking at one time or the other, on programs with various captions such as: Education for all, Mass Literacy Campaign (MLC) and so on. However, one-third of the adult population still lack basic education. Some of the citizens can only write and speak in local languages, and most, if not all of the ICT facilities imported into Nigeria are configured in English Language. Therefore, indigenous people with language barriers are deprived. Another issue of social exclusion in Nigeria is the disparities between urban and rural areas (Ifijeh, Iwu-James & Adebayo, 2016).

Underpinning the foregoing was Kuboye, Alese and Imasuen, (2012) when they reported that rural areas in Nigeria constitute about sixty percent of the country's habitable land space. These parts of the country are adjudged economically underdeveloped, as they are plagued with poor infrastructure, hence the continuous migration of persons in the productive age bracket from rural to urban areas in Nigeria. They explained further that in terms of the advantages that ICT offers, those who are on the disadvantaged side of the digital divide remain digitally excluded. This explained the more reason why rural areas in Nigeria are underdeveloped and their level of information literacy is alarmingly on a low level. On the other hand, apart from the lack of information literacy skills, most people in these communities are low-income earners and as such, the provision of ICT facilities remains a luxury.

New Roles of Libraries, Archives, Museums and other Information Providing Institutions in Tackling Social Exclusion

Libraries, museums, archives as well as other information providing institutions are agents of social communication. They help to bring awareness and as well bridge the information gap among members of the society. Since social exclusion is not a new phenomenon in this world, researchers in LIS field had carried out research on the new roles of libraries, archives, and

museums in tackling social exclusion in global such as Muddiman et al (2000); Dutch and Muddiman (2001); Durrani (2005) among others. Ifijeh, Iwu-James & Adebayo (2016) enumerate the various ways by which information centers in different countries had combat social exclusion, such as in Chile, the National Digital Literacy Campaign was launched with the goal of training 500,000 Chileans in ICT by 2005, largely via a network of over 300 public libraries. So far, thousands of Chileans have benefited from the program. The free training has helped Chileans launch businesses, navigate market information and develop technology skills to improve their job competitiveness. In Poland, Polish public libraries are able to offer their users free internet access. In Uganda, Hoima Public Library provides free internet access and training for health workers and the public. In the United States, U.S. public libraries are providing e-book content to borrowers to ensure that all Americans continue to have access to commercially produced content through their local public libraries. In 2012, public libraries reported that they were the sole provider of free public access to computers and the internet in 62.1% of communities in the United States. In Malaysia, public libraries provide electronic corners in its libraries. The electronic libraries serve as one-stop sources of information and even entertainment. In South Africa, public libraries provide space for information kiosks and tele centers. In Estonia, open access internet points was establish in public libraries. In Sunderland, England, the public library provides free access to PCs (personal computers) alongside training for adults and children users.

Recommendations

The following are the new roles information-providing institutions can assumed to curb social exclusion:

One of the new roles of libraries, archives and museum are to offer classes in general computer skills and technology training either online or within the library, archives and museum.

Information centers need to provide designated spaces, equipped with smart devices for tutorials within the library, archive, and museum.

They should offer free or subsidized internet access alongside support and training for people in the environment they situated.

They should also help people in the environment they were situated to enjoy learning by introducing them to the use of open content i.e. editing and combining various digital resources (including pictures and sound) to make learning interesting.

They should also support and encourage open publishing platforms, blogs, instructional technologies, wikis, social media, citation tools, data visualization tools among others.

Libraries, archives, and museum should document openly state oppression against its own people by recording, preserving and making available, at a later stage, records of events taking place around them.

They should also be part of any Digital Inclusion Initiative (DII). This means that libraries, archives, and museum should champion programs aimed at equipping people with digital skills, which would meet their information needs and increase their chances of enjoying sustainable development.

Sound recordings, photographs, video filming, recording and preserving oral histories against social exclusion should become important forms that they actively collect and promote.

Another new role of libraries, archives, and museum is that they should pay attention to underground and alternative material that are becoming the main communication media for people struggling for change.

Librarians, archivists, and curators and information scientists need to become activists in the various struggles of the people against social exclusion so as to become relevant to the people they serve and avoid the one-dimensional approach

Information centers need to become friends to all those who have no friends. This can happen only when they establish active relationships and communications links with people's struggles. This can happen by recruiting people from these struggles as library assistance and information workers.

Libraries, archives, and museum should acquire and provide access to all kind of digital content.

Conclusion

The emergence of Information and Communication (ICT) has reshaped information profession by bringing tremendous changes to the way they operate. It also help libraries, archives and museums to remain relevant in today digital age. This paper identified how some traditional roles of the libraries, archives, and museums drastically changed in the digital environment, which enables the information professional in these institutions to acquire some technical skills that enable them to deliver their services effectively. On the other hand, the paper illustrated that the issue of social exclusion is not a new phenomenon in the whole world (both in the developed and in developing countries).

Social exclusion comes in different ways such as disparity among nations, the inability of individuals to participate effectively in economic, social, political and cultural life, alienation and distance from the mainstream society among others. However, libraries, archives, and museums as social institutions have roles to play in order to tackle the issue of social exclusion by reshaping

their ways of operation that include some service that will be made available to those that were socially excluded. This paper framed out some new roles for information service providing institutions to tackle social exclusion, such as provision of support people's agitation against social exclusion. They are implore to be part of any Digital Inclusion Initiative (DII).

The implication for the libraries, archives, and museum is that if they still want to be relevant in this present age, they need to champion programs aimed at equipping people with digital skills that would meet their information needs and increase their chances of enjoying sustainable development.

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