Open Educational Resources and Driving Access to Knowledge:
Action for Libraries in Nigeria

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Abstract

In the world of exponential growth of information and the influx of technologies in diverse formats, access to information and knowledge is a critical issue. Information and knowledge are worthless if access cannot be adequately provided. Knowledge is as important as the level of access provided. Open Educational Resources (OERs) provide strategic channel to access knowledge. They are important where access to information and knowledge is limited. This paper discusses the lead actions libraries in Nigeria can take to drive access to knowledge. It discusses the challenges facing most libraries in Nigeria in harnessing the OERs as tools to improve lives and livelihoods in the march towards the information society. In driving access to knowledge, libraries in Nigeria must strive to bridge the digital divide, explore the potentialities of OERs, create a network of digital libraries, explore the possibilities and potentialities of ICT and make individual local resources accessible over networks

Introduction

Libraries have from origin had their roots in knowledge. They are one of the most significant institutions in human history. The writings of the thoughts by men from the past, the learning of the present, and the hopes and fears of the future all could be seen in the written words that were preserved and accessible in libraries. Libraries in the twenty first century are still portals of knowledge for everyone and they guarantee that whoever you are you can open the door to information, knowledge, learning and help. So many great men have profited from the library as expressed by Isaac Asimov an American author and professor of biochemistry at Boston University:

> "I received the fundamentals of my education in school, but that was not enough. My real education, the superstructure, the details, the true architecture, I got out of the public library. For an impoverished child whose family could not afford to buy books, the library was the open door to wonder and achievement, and I can never be sufficiently grateful that I had the wit to charge through that door and make the most of it".

Therefore, there is a logical link between the library and knowledge and access is a key issue. A library without adequate access to information, books and knowledge is as chaotic as a world of books without any form of order; the world without order or the Internet without form and organisation – utterly useless. Tise (2011) argues that IFLA and the library world are cognizant that unfettered access to information is an essential factor in facilitating political stability to the world, quickening the pace of recovery from the internationally experienced recession, eradicating poverty, decreasing disease and ensuring a green environment. It is axiomatic that access to information ensures a just society for the citizenry. In this vein, Calvo (2012) notes that rapid technological developments as well as changing trends in scholarly publishing and communication have made student's access to and interaction with scientific knowledge a complex and often overwhelming experience.

Information, Knowledge and Libraries

In an IFLA Presidential brainstorming session in 2011 on libraries driving access to knowledge, the IFLA President 2009 – 2011 drew these points:

- ➢ "knowledge is foundational to all spheres of life;
- ➢ "knowledge is produced when information is absorbed, processed and internalised by individuals;
- ➢ "knowledge is critical for the growth of society."

They decided that the main concepts in understanding knowledge were: information, knowledge, library, access and data. Access to information is therefore an imperative for the development and use of knowledge. Knowledge generation is essential to the process of development. Knowledge is

functional at many levels: it can alleviate poverty and deprivation; it serves as a springboard for innovation and change; and, it is a catalyst for national development and personal achievements. Knowledge is the key to success" (Tise 2010). As a major source for information, libraries serve a wide spectrum of information seekers, who are not only critical but central to the facilitation of knowledge generation. Equal access to knowledge serves to ensure the stability of nations and the assurance of world peace. The growing use and incorporation of technology to access knowledge enables it to become more available to this and future generations.

The IFLA Free Access to Information and Freedom of Expression (IFLA/FAIFE 2002) portrays the view that the right of access to information and ideas is vital for all societies. FAIFE argues that if citizens of the world are to participate and make informed choices they must have unrestricted access to information and be able to generate knowledge. An informed and knowledgeable citizenry adds value to the prosperity and development of a society. This argument is corroborated by Hamilton and Pors (2003) who advance that: "access to information allows citizens to participate in the democratic process. In this equation, the library today is seen as a composition of intricate elements aimed at arranging and re-arranging access to knowledge.

Open Educational Resources
Open educational resources (OERs) are resources available at little or no cost that can be used for teaching, learning, or research. The term includes textbooks, course readings, and other learning content; simulations, games, and other learning applications; syllabi, assessment tools; and virtually any other material for educational purposes which are freely available. OER typically refers to electronic resources, including those in multimedia formats, and such materials are generally released under a Creative Commons or similar license that supports open or nearly open use of the content. By providing educators with new access to educational material, open resources have the potential to spur pedagogical innovation, introducing new alternatives for effective teaching. Moreover, learning resources that can be modified and reused promote collaboration and participation—two key elements of a Web 2.0 approach to teaching and learning (Educause, 2010). The resources required to develop high-quality learning materials and activities for a full complement of courses can be prohibitive for many institutions and instructors. By distributing the costs over a larger number of users, OER brings a greater range of tools within reach of more users.

Action for Libraries
In driving access to knowledge, there are tasks and critical challenges facing libraries as knowledge institutions. Part of the core principle of the existence of libraries is that they must ensure equitable access to knowledge and advocate for the necessary resources to enable them provide access to knowledge. As such, libraries have to take on new tasks and roles in providing access to knowledge, developing digital libraries and institutional e-repositories and promoting open access as an alternative method to improve wider access to knowledge.

Feather (2006), Mathur and Ambani (2005) and Godlee et al. (2004) agree that libraries are critically important in driving access to knowledge. Libraries must make every effort to dismantle all barriers that exist between users and the information and knowledge contained in their collections. Libraries must start opening their collections and services to all communities, especially to communities that have been and continue to be deprived of the world's knowledge.

Lor and Britz (2007) assert that "modern information and communication technologies have created many opportunities for civil society, opening up space for dialogue, participation and creativity." Libraries, with all that they have "accumulated over the centuries", combined with ICTs, offer a total knowledge package for the Information Society.

Tise (2009) identified some key enablers of Libraries driving access to knowledge. The first one is User-oriented access to knowledge actions. This is central and hinges on the imperatives of information literacy. This incorporates *inter alia*:

✓ bringing libraries and resources to their users
✓ empowering users through information literacy, social networking etc.
✓ enabling access to information.
✓ facilitating the full participation of all citizens in societal activities.

The Changing Landscape
The digital revolution is fundamentally changing the library's business, allowing wider access than has ever before been possible and enabling increases in the efficiency of service provision. The continuing acceleration in the move towards an information society places the library at the centre of

society's cultural, scientific and economic development. The use of technology offers new opportunities to increase access to knowledge, helping to improve individual livelihoods. Through technology, libraries are well positioned to extend access to previously under-served users.

Death of libraries – real or utopian? The information and communications revolution of the 1980s and 1990s was widely seen as harbinger to the death of libraries. These predictions have proved unfounded. Herring (2001) argued that the Web is great; but it is a woefully poor substitute for a full-service library. It is mad idolatry to make it more than a tool. Libraries are icons of our cultural intellect, totems to the totality of knowledge. The Internet is marvellous, but to claim, as some now do, that it's making libraries obsolete is as silly as saying shoes have made the feet unnecessary. Worpole (2004) wrote that as pundits were drafting the obituary of the library, the rise of information and communications technology (ICT) - thought by some to be about to pull the plug on the library service - arrived just in time to save it.

The Information Society

Beniger (1986) defines information society as a society where the creation, distribution, use, integration and manipulation of information is a significant economic, political, and cultural activity. The aim of the information society is to gain competitive advantage internationally, through using information technology (IT) in a creative and productive way. People who have the means to partake in this form of society are sometimes referred to as digital citizens – a term that has also produced coinages as 'digital migrants' and 'digital natives'. This is one of many dozen labels that have been identified to suggest that humans are entering a new phase of society.

This new development in every sector of society created new vistas of service in the library profession. It also provided enhanced avenues of providing access to information and knowledge. It also created a gap described as the digital divide which could lead to shaping new classes of those who have access to ICT and those who do not. In such circumstance, recognizing that these challenges and opportunities require global discussion on the highest level, the International Telecommunication Union (ITU), following a proposal by the government of Tunisia during ITU Plenipotentiary Conference in Minneapolis in 1998, approved Resolution 73 to hold a World Summit on the Information Society (WSIS). This was put forward to the United Nations. In 2001, the ITU Council decided to hold the Summit in two phases, the first from 10 to 12 December 2003, in Geneva, and the second from 16 to 18 November 2005 in Tunis. This gave birth to the march towards the information society. In this march, libraries are a key element as they occupy a significant position in harnessing technology and information to transform lives, work and economy.

The former Secretary General of the United Nations, Kofi Annan, in reiterating the value of technology in the journey to the information society noted: "We are going through a historic transformation in the way we live, learn, work, communicate and do business. We must do so not passively, but as makers of our own destiny. Technology has produced the information age. Now it is up to all of us to build an information society". There are no more disputes about the extraordinary power of information and communications technologies. Information technology is a global asset to libraries; in Nigeria, libraries should consider how best to use the new global asset. Mr. Annan noted further that from trade to telemedicine, from education to environmental protection, we have in our hands, on our desktops and in the skies above, the ability to improve standards of living for millions of people on this planet. We have tools that can propel us toward the Millennium Development Goals; instruments with which to advance the cause of freedom and democracy; vehicles with which to propagate knowledge and mutual understanding. Indeed, formidable tools to help drive access to information and knowledge in Nigeria, Africa and the world.

Bridge the digital divide

This depicts the divide between those with access to new technologies and those without. Reports and findings indicate that even in developed countries there still exists a digital divide that in many cases is actually widening over time. Access to information and knowledge is highly restricted where there is a widening gap in access to technologies. Irving (1999) in a report asserts that minorities, low-income persons, the less educated, and children of single parent households, particularly when they reside in rural areas, are among the groups that lack access to information resources. This reality merits a thoughtful response by librarians – such response that is consistent with the needs of Nigerians in the information age.

This widening gap described in the digital divide is actually several gaps in one:
➢ There is a technological divide –- great gaps in infrastructure.

- There is a content divide. A lot of web-based information is simply not relevant to the real needs of people.
- There is a gender divide, with women and girls enjoying less access to information technology than men and boys. This can be true of rich and poor countries alike.
- There is a commercial divide. E-commerce is linking some countries and companies ever more closely together. But others run the risk of further marginalization. Some experts describe the digital divide as one of the biggest barriers of access to information.
- And there are obvious social, economic and other disparities and obstacles that affect a country's ability to take advantage of digital opportunities.

From the perspective of library operations, we cannot assume that such gaps will disappear on their own over time, as the diffusion of technology naturally spreads its wealth. An open, inclusive information society that benefits all people will not emerge without sustained commitment and investment. The onus is on libraries to provide avenues to bridge the gaps. While technology shapes the future, it is people who shape technology, and decide what it can and should be used for.

The Challenge

The developing countries have more challenge to contend with including deprivations in a range of areas which have become endemic. There is weak technological infrastructure and in many instances it is even non-existent. This poses great barriers in accessing technologically-driven information. Further, much of the software and hardware required for technologically-driven information are substantially alien to developing economies. In addition, the cost of hardware, software and other infrastructural supports is considerably prohibitive. Thus, the preoccupation and assumption that a technological solution will be an immediate answer to hindrances to information has several inherent challenges. While it may seem paradoxical, one of the answers to increasing access to knowledge in developing countries is the use of ICTs. Mathur and Ambani (2005) are very convincing when they state:

> "the application of ICT solutions for ... developing countries open up a vast range of possibilities. Giving an opportunity to the majority of the inhabitants living in rural areas to cross the digital divide to obtain access to information resources and services provided by ICT is the next revolution waiting to happen."

Digital technology seems at first sight to offer untold opportunities for developing countries to catapult the digital divide and leapfrog technological generations in order to utilize technologies of the day. In reality however, the high cost of establishing a digital platform, continuous operating costs, on-going access fees and a demand to keep abreast with technological advances place inordinate burdens on developing countries and deprived communities wishing to make use of digitally available information (Lau, Tammaro & Bothma, 2012).

Way Forward

In spite of challenges and constraints, libraries in Nigeria have crucial roles to play in driving access to knowledge. Significant steps include:

i. Bridging the digital divide – develop viable information literacy programmes that would turn your library into resort centre for the digital haves and have nots.
ii. Creating a network of many digital libraries – no library can have it all or can be an island. There is need for cooperation and sharing. This will help to avoid duplication; cooperating in networking and standards has become inevitable; also cooperating in developing common and more-effective solutions
iii. Exploring fully the potentialities and possibilities of the global asset of ICT and digitisation.
iv. Making individual local resources accessible over networks – it appears increasingly paradoxical that users have to physically visit the library to consult electronic publications. Increase access by making them available over the networks.
v. Preservation and archiving of digital resources – develop programmes to maintain digital materials to keep them alive. This would help avoid the risk of loss resulting from rapid changes of hardware or software or complete decay or destruction of digital resources.

Conclusion

Finally, in the words of Reding (2005), libraries face real challenges in coping with the transition to the digital age. To avoid becoming the dinosaurs of the future, they have to adapt, to attract new and young users, and to develop new business models. This implies profound changes in the organisations, in the skills and sometimes in attitude. Libraries have a unique role to play in driving access to knowledge. The information society offers us new possibilities to do this. To seize the opportunity, there is need for libraries in Nigeria to collaborate and work together.

Libraries bring you the world. They bring opportunities to all.

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