Changing lives through information for development: an exploration of African digital library initiatives in the 21st century

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Abstract

The role of information in development is well discussed in the literature. This paper surveys digital initiatives that have transformed their communities Africa. The initiatives have demonstrated that the Africa library communities are increasingly serving their citizens with relevant cutting edge services that locate information as a critical element for development. Africa stands poised for new and exciting growth. Seven of the world’s fastest growing economies are countries in Africa. Africa has a young population, most of them born in the digital age. Libraries that serve youthful populations and growing economies must efficiently respond to the needs of fast paced and digitally savvy populations, as well as demands of growing economies.

The infrastructure for developing efficient digital library services has been facilitated by developments in both wireless and fibre technology. There has been growth in digital library initiatives in both academic and public libraries. Increase in the number of institutional repositories, other open scholarship initiatives and social media ensure relevant African content in digital spaces. The emergence of Africa wide library formations like the Conference of African National Librarians, the Africa Public Library network and the African Library and Information Association (AfLIA) presents an opportunity for coordinated development of library services that respond to the demands of youthful populations in fast growing economies. This paper highlights some of the developments in African libraries as they position themselves to serve their populations in the digital age. It demonstrates that African libraries remain relevant and critical to development on the continent.

Introduction

The Universal Declaration of Human Rights, adopted by the UN in 1948, first stated that information is a resource in the development process. Schram (1964) stated that information is a national resource that is required to facilitate the development process. Information facilitates informed decision-making in the development process. Over 6 decades ago the role of information in the development process was established. Over the years it has been established that information facilitates informed decision-making in the development process. Poser (1990) suggested a whole new dimension of information in development when he identifies the emergence of an “information mode” of
production in which productivity depends on information. He argued that the current era in human development is called the information society because of our dependence on information for production and productivity. Those who have crucial information can make informed decisions and meet their development goals and production targets. Conversely those without vital information simply cannot function effectively in this era of the information mode of production.

This paper highlights how African libraries are rising to the occasion and ensuring that communities they serve have access to information. The paper further highlights that libraries have a critical responsibility to eliminate all forms of barriers so that African communities can participate in the digital age.

The role of information in development

Schram (1964) identifies the following three roles of information in development.

(1) The watchmen role. This role is largely performed by the mass media as they keep citizens informed about crucial issues and developments in their society.

(2) The policy role. In this case, the role of information is to provide whatever information governments, corporations, and community leaders need so that they can make decisions and apply them at all levels of society.

(3) Teacher role. In this role, information facilitates socialization through social institutions such as schools, families, religious organisations and various kinds of groups and associations.

Writing many years later Kavulya(2007) stated that “information and knowledge are recognised as the world’s most critical resources and driving force for social development and modern economic system.” Although Schram (1964) identified the watchmen, policy and teacher roles five decades ago, each of them is still prominent in the field of information science today. The assertion by Kavulya (2007) enforces the multi-faceted role of information in the development process. It is the multi-faceted role of information in the development process that makes it a critical ingredient vital for all sectors of the community. Nothing of importance in society can happen without the availability of appropriate information.

The role of information in development has been widely discussed. The facilitating role of information in development requires an appropriate delivery mechanism. The Libraries in the 21st century are information delivery mechanism. African Libraries of 21st century are increasingly becoming enabling mechanism and staking their claim as development agencies.

In more recent times, speaking about public libraries, specifically, Elbert, Fuegi and Lipeikaite ( 2012) state that “public library projects help transform lives through innovative services”pg148. Alemayehu (2014) further asserts that “Public libraries provide health information, workforce development, access to agricultural resources, and education opportunities, often tapping technologies to enrich the process” (http://www.elearning-africa.com/eLA_Newsportal/public-libraries-national-development-goals) The role of public libraries to deliver public information has not
diminished. For many communities in urban areas and rural areas, public libraries are the only access points to the Internet, reading space as well as learning resources. They have in fact become primary agencies for development.

**Information as a human right**

The UNDP (2006) outlined four critical conditions for human development:

- a) To be knowledgeable
- b) To lead long healthy lives
- c) To have adequate resources needed for decent standard of living
- d) To be able to participate in the life of the community.

When one examines each of the above closely, it is obvious that knowledge and information are critical to the development of humanity.

Access to information is a human right. Access to information is essential for the development of humanity. In the 21st century this remains critical as more and more information becomes available digitally. In line with, and beyond the Millennium Development Goals pursuits, African countries have a responsibility of eliminating all barriers to access to information, and bridging the digital divide. Achieving inclusion and access to information depends on elimination of all forms of barriers. Elimination of the digital divide is more than a cliché. It is the responsibility of every freedom loving African who is committed to Africa’s participation in the information society.

Public libraries are critical engines and intermediaries in elimination of the digital divide, and facilitation of access to information and information medium. The intermediary role remain critical especially because the African Continent still exhibits these characteristics:

- **Households with a computer** 8.1% and 34.7% for Sub-Saharan Africa (SSA) and Middle East and Northern Africa (MENA), respectively, as opposed to 40.3% for the world, 77.7% for High income countries, and 79.2% for Euro Area, and
- **Individuals using the internet are** 14.8% for (SSA), and 30.7% for (MENA), as opposed to 35.5% for the world, 75.4 for High income countries, and 75.9% for the Euro areas,

Africa has the lowest rates of access to computers and individual use of internet according to the World Development Indicators (2014). Public libraries are the sources of internet access as stated by Alimaayehu (2014). They are critical to the delivery of information as a human right. They facilitate the right to access to information on our continent.

**Infrastructure readiness**

The often stated Africa Union position “African solutions to African problems” is fast being repeated in the development sector, including libraries. This is expressed by the resurgence of community libraries, digital agricultural information and African occupation of social media in twitter spaces, blogging, Facebook etc.
The undersea cables, as indicated in the map below, demonstrate that fibre has connected Africa to the world. The advent of the mobile phone, and the ubiquitous sunshine, provide ample solutions to infrastructure challenges.

*Map 1 Under sea cables.*
Mobile phone usage

While the graph below indicates that Africa had the lowest density of mobile phone per person in 2013, Africa is the world’s fastest growing mobile market in the world, according to the GSM Association.

The growth in the mobile phone usage has been accelerated by relatively cheap broadband across nations and a growth in Africa’s digital citizens. Mobile phones are transforming everything from banking and healthcare to agriculture and politics – so why not education and libraries?
Africa’s development and Libraries

The table below indicates that Africa has a youthful population. Generally developing countries have younger populations than developed countries. This critically changes the dialogue of the future of knowledge provision for developing countries generally, and Africa in particular.

<table>
<thead>
<tr>
<th>continent region</th>
<th>% age 0-14</th>
<th>% age 15-44</th>
<th>% age 45-64</th>
<th>% age 65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>26.1 %</td>
<td>46.2 %</td>
<td>19.7 %</td>
<td>7.9 %</td>
</tr>
<tr>
<td>Africa</td>
<td>39.8 %</td>
<td>45.2 %</td>
<td>11.4 %</td>
<td>3.6 %</td>
</tr>
<tr>
<td>Eastern Africa</td>
<td>42.6 %</td>
<td>44.5 %</td>
<td>9.7 %</td>
<td>3.2 %</td>
</tr>
<tr>
<td>Middle Africa</td>
<td>44.0 %</td>
<td>43.4 %</td>
<td>9.6 %</td>
<td>2.9 %</td>
</tr>
<tr>
<td>Northern Africa</td>
<td>30.9 %</td>
<td>48.2 %</td>
<td>15.8 %</td>
<td>5.1 %</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>30.2 %</td>
<td>49.5 %</td>
<td>15.4 %</td>
<td>4.9 %</td>
</tr>
<tr>
<td>Western Africa</td>
<td>42.7 %</td>
<td>43.8 %</td>
<td>10.3 %</td>
<td>3.2 %</td>
</tr>
</tbody>
</table>

African population by age group in percentage
(Data for July 2013) Source: UN, Dept. of Economic and Social Affairs, Population Division

The UN Secretary-General Ban Ki-moon said in his message for Africa Day 2011:

“... Africa is the world’s youngest continent; 70 per cent of the population is under the age of 30. Despite advances in education and economic growth, progress remains fragile, inequalities are widespread and young Africans face major difficulties in finding decent jobs and participating in decision-making”

According to the millennium development project in 2013, 62% of Africa’s population was below the age of 25. Furthermore, 70% of African population was under the age of 30. Growing populations often lead to economic growth, but only if Africa creates its own jobs through the ingenuity, ability, and skill of its own people. High potential is possible through education, training and creativity.

African librarianship is challenged to provide services to young population, as a basic service, and in support of the education. The young emerging populations of the continent and, its seven fastest growing economies, demand a re-look at the perception of the continent and its development dialogue. The emergence of young, educated, blogging communities, and digital natives all demand that African development agencies engage differently with its
circumstances (See: Telling the African Story: Komla Dumor at TEDxEuston
https://www.youtube.com/watch?v=DfJn8HCKO8g)

The maps below demonstrate the transformation goal desired and propounded by many young African. African libraries are engaged in that transformation struggle by delivering information for development to their communities. They thus bridge both the information and the digital divide.

Map 2 Africa of old

Map 3: Transformed Africa
African libraries are finding African solutions to issues of development and positioning themselves and their communities to lives beyond the MDGs. They are not regarded as separate or elitists, but very much part of the community. They are part of the transformation agenda contributing to the development of humanity. In Ghana, libraries are joining forces with radio and ICT to provide Information on health, including maternal health. In Nigeria, HiV/Aids corners are provided at the library. In Botswana gardens are run in the grounds of libraries by the communities. They are neutral and safe spaces. They are being seen as agents of development.

**Case studies**

A number of examples of Libraries have been used to demonstrate the possibilities

a) Namibia:

Modern Community libraries.

The Greenewell Matongo library in Windhoek has been cited as success story of a library that serves communities. Based on volunteers, and built around meeting the needs of the community, this success story is now being replicated across Namibia through the “community libraries imitative”.

The library was opened in March 2005 by the City of Windhoek in the Greenwell Matongo area of Katutura. Greenwell Matongo - Wikipedia, the free encyclopedia en.wikipedia.org/wiki/Greenwell_Matongo. While it is located in an informal settlement, it has proved to be an oasis for reading, study and community development. It is used by students, community members and visitors to the community. Some users have had this to say about the library:

“ ‘The library and its people do give us good service,’ said a visibly happy grade 10 learner. You can study in peace here because the place is very silent”.

“ ‘I come here everyday, I like the internet and printing stuff from the computer,” said 16 year old Elvis Mukungu, a grade 11 learner.’ ”

www.thefreelibrary.com/Greenwell+Matongo+Library+Proving+Very+Popular.-

This library is indeed transforming its community. It is providing a much needed service that only it could provide. It is providing information for developing individuals as well the whole community.

b) Kenya

The collaboration of Ministry of Agriculture with the Kenya National Library service (KNLS) has brought a cross section of services that help bring information to farming communities. The KNLS has partnered with Ministry of Agriculture with the aim of empowering farmers with relevant and timely information. Such information is focused on improved farm production. Improved production will lead to creation of employment in agricultural sector and also reduce scarcity of food in the country. The National Farmers Information Services
(NAFIS), as the project is known as piloted at Kenya National Library Services, Nakuru Branch.

Outlining the role of Kenya Library Service KNLS and that of the Ministry of Agriculture, Joseck K Olala (ICT Officer KNLS) states

“The role of knls

The main objective of this project is to;
1. Offer space at knls for the establishment of information desk.
2. Routine update of NAFIS/NACIE with relevant information.
3. Produce print materials to be accessed by users.
4. Provide more information on the prioritized value chains.
5. Offer space, provide reliable network and security for the information servers at knls buruburu branch

“The role of Ministry of Agriculture:
1. Liaise with knls staff in manning of Information desk.
2. Promote ASDSP objectives through production of Banners and flyers for display at the library.
3. Publicize the partnership through conferences and public meeting.
4. Contribute to Agricultural knowledge management (sharing).
5. To pilot the implementation of NAFIS in the entire KNLS outlet.”

More information on the project can be found at http://www.nafis.go.ke/2011/03/nafis. It is operationalized through knls.

The NAFIS project is successful because it is mainstreamed in the activities of the KNLS and the Ministry of Agriculture. It is not a stand-alone project.

KNLS Buruburu library- a reading project

KNLS runs a mobile digital librarian project that teaches children to read. David Kagoro says about the project

“The mobile digital librarian travels with a laptop, a modem, an LCD projector and speakers. The librarian accesses the online site that has the stories, uses the laptop and projector to project text and pictures onto a screen/white background or a wall, and reads with the children/or the story reads itself via the speakers for children to listen. An automatic cursor follows the text word by word, a feature that helps the children get the correct pronunciations of the words in the text. The speakers amplify the sound for larger groups. Some stories can be downloaded to be accessed offline later. Online stories are so exciting as the characters come out alive making the story so powerful that children live to remember for a long time. This service is so unique in that it enables children with eye sight disability enjoy the audio module while those with hearing impairment enjoy visuals and text making it an all-inclusive service where children enjoy stories together irrespective of their disabilities.

After the story, children ask questions and discuss content. All the online children stories are absolutely free of charge. What you need is a reliable internet connection, a laptop and a projector.”
This type of innovation combines orality, digital content and community. It introduces reading to groups not to individuals. It brings digital possibilities to communities. The Library sources the stories from the World Wide Web and brings them to communities. The inclusive content ensures that even children with disabilities benefit from the programme.

c) Uganda

In Uganda, community libraries are transforming lives. Nambi Ssepuuya Community Resource Center in Igombe Village is the only source of quality reading material. The library is well stocked with books for different age groups and learning levels, ranging from primary school to university education. Furthermore, all major books on the Uganda schools syllabus are available at the community library. The library has sitting capacity of 200 people.

The Library has harnessed solar energy to power its lights, and it networks of computers. For the surrounding communities this is the only source of reading materials. For many students this is the only sources of digital content.

Another example is the Paidha Public Library in North Western Uganda a one roomed library was partitioned with reeds picked from the river in order to create a children’s space. The divided space has attracted children into their own space. In that space they can do games, read and play. The library now registers about 70 a day up in contrast about 10 a day before the partition.
The two examples from Uganda demonstrate the pivotal role for library to providing learning material to communities, as well as being intermediaries in provision of access to digital content. Without those libraries, communities would be with no access to reading material, nor access to the internet.

The scalability of the digital initiatives

Are the projects outline above scalable? Can they be replicated?

AN international NGO eifl.net runs a project that supports innovative libraries in developing and transition countries [http://www.eifl.net](http://www.eifl.net). The eifl PLIP project documents the impact of innovative library projects in transforming communities across Africa and Asia. Sharing these examples of success stories across the continent profiles the possibilities and generates even more innovation.

All the three country cases studies from Uganda, Namibia and Kenya demonstrate that collaboration of libraries with other government departments builds sustainability of such projects. Furthermore, involvement of the community in the creation of the libraries ensure ownership of the community libraries.

Lessons learnt

The lessons learnt are many and varied.

Sustainability
The sustainability of the project depends upon it being a mainstreamed project. Stand-alone donor funded programmes are not sustainable. However, mainstreamed projects for which donor assistance is sort to enhance the project, are indeed sustainable. In all three countries sustainability has been ensured by the mainstreaming of projects into community and government library services.

Collaboration

Collaboration with other government department maximises advantage as one government infrastructure is use for several purposes. The collaboration of the library and other government department brings traffic to the both the library and the library website. It helps to mainstream the library as a development agency.

Furthermore the examples from Uganda demonstrate collaboration between government, community and external donations. The involvement of the community in the service ensures ownership and entrenches the services as a community service.

Innovation

It has been said that “necessity is the mother of all inventions”. When libraries within Africa begin to seek solutions to their own problems they will take their place as development agencies. The examples cited above are just a few that prove that in the material circumstances of communities solutions may emerge.

Beyond 2015 development agenda.

For libraries to continue to build on the gains made in the MDGs era, they need to be mainstreamed in the post 2015 development agenda. It is therefore imperative that organisations like IFLA, AfLIA(www.aflia.net) and African Union Commission locate libraries in the post 2015 development libraries agenda.

Conclusion

Libraries throughout Africa are becoming one-stop centres that not only provide communities with reading material, but are also engaged in other activities that support literacy, elimination of HIV/Aids, support maternal health and agriculture. This paper demonstrates how the library services of the 21st century Africa are seeking to serve the digital natives they serve. Libraries are agents of change. They are indeed contributing to the development and transformation of their communities. Libraries are indeed changing the lives, one community at a time.

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Community Library gives a lifeline to poor students


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