# User Centered Libraries in Africa: The Role of Library 2.0 Tools

### Okocha Foluke<sup>1</sup> & EyiolorunsheToluwani<sup>2</sup>

Centre for Learning Resources, Landmark University<sup>1,2</sup> dada.foluke@lmu.edu.ng<sup>1</sup>

### Abstract:

Purpose: This study investigated the extent of Library 2.0 tools in Africa by a review of literature

**Design/Methodology/Approach:** A review of literature was carried out on the adoption of Library 2.0 technologies in Africa, challenges currently facing the continent and also proffered solutions to those challenges.

Findings: Library 2.0 services in Africa are still in its infancy, though some universities especially South African universities have taken the front stage in its implementation. However, challenges such as lack of a clear policy to support Library 2.0, infrastructure and power challenges still limit the adoption of these technologies in African countries. There is a need for countries in Africa to adopt smartphones in carrying out Library 2.0 services due to its proliferation in Africa, improve on specific staffing on emerging technologies in Libraries, establish a clear policy on the adoption of these technologies and offer opportunities for adequate training of staff

*Implication:* This study proffers recommendations on how African countries can adopt Library 2.0 tools in spite of its current limitations

*Originality/Value:* Due to the proliferation of smartphones in Africa, there is need for smartphones to be adopted in carrying out library 2.0 services to limit the digital divide in its adoption.

Keywords: Library 2.0 tools; Library professionals; Smartphones; Libraries; Africa

### Introduction

The emergence of the internet and the World Wide Web (www) has brought about changes in the information seeking behavior of users of library services. Despite the fact that the web is creating new opportunities for information access; it has also become a rival to library services. Godwin (2006) reports that the internet generations of students do not see the library as a natural place to conduct their research; a web presence and the availability of materials in electronic formats do not assure that the library will appeal to users. Low (2003), points out students' dependency on open internet searches despite the fact that quality information is not readily available through open internet searches.

The library is no longer only concerned with being just a custodian of information resources; but is now more concerned about meeting the information needs of its users. Coelho (2011), states that the future of academic libraries will depend on their ability to monitor development of new technologies, explore them and integrate advantageous innovations in their services. Casey & Savastinuk (2006) states that library 2.0 gives users a participatory role in the services libraries

offer, by tailoring library services to meet user needs. The 21<sup>st</sup> century library is participatory where libraries are now more concerned about meeting the information needs of its users than just being custodians if information sources that is hardly utilized by the users. Rutherford (2008), states that libraries must be quick to adopt these tools and services.

The concept of library 2.0 was first generated by Michael Casey and published on his blog, library crunch in 2006. It allows libraries to operate in a collaborative atmosphere driven by user needs. Christine Mackenzie (2007), states that library 2.0 has changed the library brand. "Library 2.0 seeks to improve services to current library users while also reaching out to potential library users" (Casey & Savastinuk, 2007). The library 2.0 technologies encourage users to participate in the planning and execution of library services through their feedbacks (Pienaar & Smith, 2008). Library 2.0 empowers users through participatory and user driven services (Casey &Savastinuk, 2007). Library 2.0 is an offshoot of web 2.0 technology that involves essentially a mash-up of and traditional library services

innovative web 2.0 services, as a means for promoting and extending information services (Harinarayana & Raju, 2009). Library 2.0 as a concept emerged from web 2.0 and it refers to an interactive user design of the World Wide Web where users not only access the web content but also generate web content. Web 2.0 technologies enhance library services by improving communication with customers, promoting and marketing services, and imparting information literary skills to users (Chua &Goh, 2010)

### **Library 2.0 Tools in Libraries**

- 1. *Blogs (Weblogs):*A blog is a website which is updated frequently and arranged in a chronological order. A blog is maintained based on the purpose for its creation. Bradely (2007), states that blogs are the vanguard for web 2.0 development. Barreto (2007) describes blogs simply as web pages with entries arranged in a chronological order. Twitter is a type of blog classified as a micro blogging tool because it has
  - In academic libraries blogs have many potentials .It can be used as a collection development tool where users suggest an appropriate title for library collection, it can also be used to post reviews, a means of promoting library resources, posting general news, as a reference tool where users post comments and receive real time responses, It useful in posting overdue notifications, creating library discussion forums, serve as a newsletter where events of the library is published and serve as a marketing tool, providing information on new acquisitions and encouraging use. Blogs are mostly used by libraries to disseminate information on book reviews, notify patrons on the availability of new books, library holidays ( Tripathi and Kumar, 2010). Han and Lin (2010) also stated that blogs are used to communicate library events, subject related referencing services. In the study on the application of web 2.0 to national libraries, Walia & Gupta (2012) stated that 28.5% of the national libraries used blogs to convey library news and events, 25% used blogs to provide information on acquisition, while 17.8% information literacy instructions on blogs.
- 2. **RSS Feeds:**RSS stands for rich site summary or really simple syndication. They contain summaries of website updates read by

syndication. RSS Feeds eliminates the need to visit a site repeatedly by helping users get website updates in a personal manner. It enables users to subscribe to specific websites without visiting the actual page. It facilitates the publication of frequently updated work such as news headlines, online databases.

Academic libraries use to receive updates from blogs and articles from online databases; it can also be used to provide current awareness services, upcoming new items, updates of new books available; this can be achieved from the university library website and online databases providing a means for selective dissemination of information to patrons

(Kim & Abbas, 2010; and Tripathi & Kumar, 2010)

In the study by Walia & Gupta (2012) most national libraries are using RSS Feeds to communicate library news and events while 36% are using it as a log feed.

- **Social Networking Sites:** Socials Networks is based on the system that enables to connect with communities. They enable users send emails, post comments .They offer an informal way of communicating with people. In a library setting social networks can be used as a means of getting feedback from patrons, it can also be used in creating awareness, library news and events, providing information for new acquisitions, sharing pictures, videos and links. Librarians can also setup professional groups to discuss and share ideas. Libraries have been seen to use twitter for instant messaging and short announcements of library services (Kim and Abbas, 2010)
- 4. *Personalization:* It is a concept that allows users adopt content layout and navigation support according to their preferences. In 21<sup>st</sup> century academic libraries the framework for OPACs is now socially enabled (Green, 2010). He stated that the OPACs should provide a personal homepage for each user. Casey & Savastinuk (2006) stated that personalized OPACs are essential in creating user centered libraries. They noted that the next generation of Library catalogs will contain web 2.0 features. This is because it allows users to have favorite titles, comment on books, write reviews, and create tags and ratings for books.

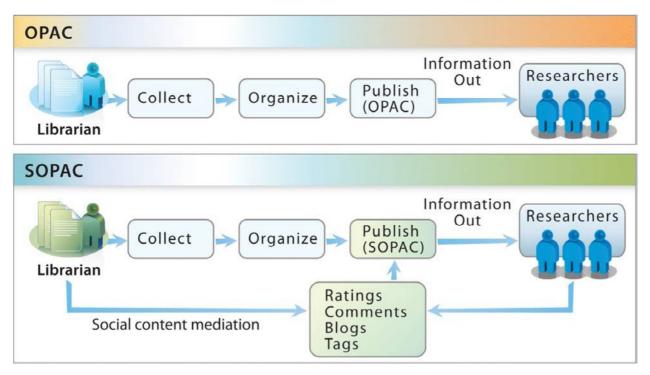


Figure 1: Social Online Public Access Catalog (SOPAC) (Green, 2010)

5. *Tagging:* Tagging is a way to organize information allowing non-experts to share their perspective on information resources. When users tag in a library setting they contribute to keywords that characterize resources. It is usually built into the library information systems where a provision is made for users to create label for articles and it store it under a chosen category a provide a note to remind them of the content of the article, so they can easily locate the contents of the information.

Kim & Abbas (2010) state that tags can be contributed by the university community that visits the OPAC. A collection of tags is a folksonomy. It is a system of classification derived from the practice and method of collaboratively creating and translating tags to explain and classify content; this practice is also known as collaborative tagging, social classification, social indexing, and social tagging.

6. *Instant Messaging:* It is also known as synchronous messaging that allows real time communication. Libraries can make use of this tool to provide virtual references to users in real time which will be available during the reference work hours. Maness (2010) says a time will come where web reference will not be distinguished form face to face reference. Mohammed (2011) states that instant messaging for reference services is

- becoming very popular in developed countries butt has not been accepted in third world countries. He stated that third world countries must note these services as it is an efficient way of handling real time reference
- 7. Wikipedia: Wikipedia is a web application that allows individuals to add, modify or delete contents in collaboration with others. It is a content management system that has no leader or definite structure as the structure of contents is created based on the needs of the people. Wikis can facilitate social interaction among librarians and the user community. It enables users share opinion on topics and issues discussed. Wikipedia's can be restricted to meet the requirements of the library environment.
- 8. *Podcasts:* A Podcast is a digital medium consisting of an intermittent series of audio, video, PDF files subscribed to and downloaded through web syndication or streamed online to a computer or mobile device. It is stored in MP3 format and used to inform users on library services, resources, research opportunities, interviews, speeches, tutorials and events held in the library. Podcasts have been found effective in training patrons on the use of library services (Tripathi and Kumar (2010).

Invariably, all libraries has a starting point, this implies that a library must not begin with all library 2.0 tools, It can begin with those

tools that fit its current library needs (Casey&Savastinuk, 2007).

## African Countries Perception and Application of Library 2.0 Tools

Wordofa (2014) in his paper on the adoption of web 2.0 in academic libraries in top African countries while looking at 82 top universities in sub Saharan Africa found out that half the libraries adopted one or more of the web 2.0 applications. He discovered that social networks were the most widely adopted while social booking and tagging where the least adopted. He states that web 2.0 utilization in Africa is still in the early stage. This corroborates the findings of Muneja, Abungu (2012) whom stated Tanzanian libraries have started using web 2.0 tools and the most common of the tools used is Facebook. He discoverers that Facebook was the highest tool with 94.4% and twitter by 66.7%. He stated that some of the benefits of using library 2.0 are enhanced awareness of resources and sufficient communication which invariably generates interest in the library. Lwoga (2014), states that students supported the adoption of library 2.0 services in and web 2.0 improves the quality of library services. Mujena & Abungu points out that in Tanzania 83.3% said lack of reliable power was the highest factor that limited the adoption of library 2.0 tools, other factors included unstable internet access, lack of technical knowledge and budget constraints limited the adoption of library 2.0 tools.

Baro et al (2013) found that libraries in South Africa use web 2.0 more than libraries in Nigeria. Atulomah (2010) in the discussion of the awareness of library 2.0 among librarians found out that there is insufficient awareness and understanding of what constitutes library 2.0 in Nigeria although 80% indicated their willingness to participate in library 2.0, In a study by Esse (2013) on the knowledge and perception of library 2.0 among information professionals in University Covenant **Blogs** and Messaging had the highest support of library 2.0 tools. Though Nigerian Libraries are willing to adopt Library 2.0, the have not adopted this technology. Baro et al (2013) states that Nigeria is still confronted with challenges such as power failure, lack of connectivity and lack of skills. These factors are constraining the use of library 2.0 tools.

Makori (2012) states that in East Africa many academic libraries are yet to embrace library 2.0. He stated that information professionals need to

understand the significance of library 2.0 and the biggest challenge is providing technologies that match the information needs of clients. He states that factors that impact negatively on the implementation of library 2.0 include limited resources, inadequate knowledge and skills among information professionals and inadequate support from parent institutions.

In Ugandan libraries given a case study of Makerere University library, library 2.0 tools have been adopted in the library. The library has created blogs to interact with users and get feedback from users. Ilako & Ikoja-Odonga (2011) states that the Ugandan libraries are in the process of improvement.

Wyk (2009) states that if libraries must stay relevant and competitive the question is not if libraries should embrace these tools but how these tools can effectively engage the clients. It was stated that in University of Pretoria there has been successful implementation of web 2.0 in the university library. Penzhorn states despite the successful implementation of library 2.0 in South African libraries, these tools are not widely used by reference librarians. She states that for successful transition into the library 2.0 service delivery environment, there is a need for skilled staff, she states that the quality of services aimed at by libraries depends on the quality of services delivered by reference libraries. It is important for the library services to effectively engage the users in meeting their information needs.

### Challenges to the Implementation of Library 2.0 in Africa

- 1. Lack of Policies to Support the Use of Library 2.0: It has been found that majority of Libraries in Africa do not have policies related to the use of web 2.0 tools (Muneja and Abungu, 2010). Considering the potential benefits of these technologies to Libraries, it is imperative for Libraries in Africa to create policies that support the use of these services
- 2. Inadequate Staffing for Web 2.0 Services: The implantation of Library 2.0 services in libraries requires adequate staffing due to the amount of time needed to attend to patrons' responses online on a continuous basis. Gordon-Murname (2006) states that for library 2.0 technologies to be implemented adequately adequate timing is needed. Baro, Idiodi and Godfrey (2013) also found in their research that majority of Librarians attributed

- a lack of time to the use of web 2.0 tools. There is therefore a need for specific staffing on emerging technologies in Africa
- 3. Poor Infrastructures and Power: Baro, Idiodi and Godfrey (2013) reported that majority of Librarians (76.7%) indicated a lack of facilities such as computers and Internet access serving as a deterrent to the adoption of Library 2.0 services. Also Muneja and Abungu(2010) identified lack of power as a major factor that limited the adoption of web 2.0 services in Libraries in Africa. There is a need to introduce the use of Smartphone for services in Africa. It has been library 2.0 reported the rate of proliferation of smart phones in the African market and the benefit of smart phones can be adapted in libraries with library 2.0 services which will invariably reduce the limitations of the African Continent
- 4. Lack of Adequate Skills on the Use of Library 2.0 tools: Libraries in Africa must begin to embrace the benefits inherent in library 2.0 services in libraries. Majority of Librarians in Africa have indicated lack of skills as factors inhibiting the utilization of library 2.0 tools (Baro, Idiodi and Godfrey, 2010). There is a need for librarians to be sponsored to conferences and workshops for the effective adoption of these tools (Dike and Umunnakwe, 2010) and for workshops to provide hands-on training to Librarians (Chu and Du, 2013).

### Conclusion

University of Pretoria has set the pace for other African countries to follow with the successful implementation of library 2.0 services, though some African countries are still facing challenges of unreliable power and unstable internet access. These factors limit the implementation of library 2.0. If libraries must stay relevant and competitive it goes beyond the implementation of these tools, libraries must be able to effectively engage its users thereby meeting information needs. The utilization of available information resources by users shows the extent of how effective a library is. The implementation of library 2.0 tools is essential because Librarians get to know exactly what the users are saying there by enabling them to meet those information needs. The Library Brand is no longer books or information; it is about facilitating people to participate, interact and providing a means for that to happen.

### Recommendation

In order for Libraries in Africa to continually stay relevant in its services, Library 2.0 is imperative. The following need to be considered:

- ➤ Use of Smartphone in Libraries to interact with patrons
- Developing of Policies on the adoption and use of emerging technologies
- Adequate Staffing to ensure continuous use of these technologies
- Training of staff on the use of information Technologies in Libraries

### References

- Aguil M., Ahmad P. and Saddique M. (2010) Web 2.0 and libraries. *Journal of Library and Information Technology* (31)5
- Atulomah B. (2010). Awareness of Library 2.0 and Participating in the Global Discussion among Libraries in Southeast Nigerian Universities. *Library Philosophy and Practice*
- Baro, E. E., Idiodi E. O. and Godfrey, V. Z. (2013). Awareness and Use of Web 2.0 Tools by Librarians in University Libraries in Nigeria. *OCLC*, Vol. 29, No. 3, pp. 170-188.
- Bradely P. (2007) How to Use Web 2.0 in Your Library: Facet Publishing,212pp
- Casey, M. E., &Savastinuk, L. C. (2006). Library 2.0. *Library Journal*, *131*, 40–42.
- Chua, A. Y. K., and D. H. Goh. 2010. "A Study of Web 2.0 Applications in Library Websites." Library and Information Science Research 32(3): 203–211.
- Coelho H. (2011) Web 2.0 in Academic Libraries in Portuguese Public Universities: A Longitudinal Study, *Libri* 61(4)
- Green P. (2010) Library 2.0 Defined: The Social Library

  <u>www.inmagic/wp\_content/uploads/Inmagic\_socia</u>

  1 library whitepaper/
- Esse U.(2013) Library 2.0: Perception , Knowledge and Reception among Information Professionals at Covenant University .Ife PsychologIA 21(2)
- Godwin, P. 2006. "Information Literacy in the Age of Amateurs: How Google and Web 2.0 Affect Librarian's Support of Information Literacy." *Italics* 5(4): 268–287. <a href="http://www.ics.heacademy.ac.uk/italics/vol5iss4/godwin.pdf">http://www.ics.heacademy.ac.uk/italics/vol5iss4/godwin.pdf</a>.
- Gorden-Murname, L. (2006). Social bookmarking, folksonomies and web 2.0 tools. *Searcher*, Vol. 34 No.1, 18-21.

- Han, Z. and Liu, Y. Q. (2010). Web 2.0 applications in top Chinese university libraries. *Library Hi Tech*, Vol. 28, No 1, pp.41-62.
- Harinarayana, N. S., and N. V. Raju. 2010. "Web 2.0 Features in University Library Web Sites." *The Electronic Library*28 (1): 69–88.
- Kim, Y. and academic libraries and users: A knowledge management perspective. *Journal ofAcademic Librarianship*, Vol. 36, No.3, pp. 211-118.
- Ilako C. and Ikoja-Odongo R. (2011) Creativity and Innovation in Ugandan Libraries: Case of Makerere University Library. <a href="http://conference.ifla.org/ifla77">http://conference.ifla.org/ifla77</a>
- Lwoga E. (2014) Integrating Web 2.0 into an academic library in Tanzania .*Electronic Library* 32(2)183-202
- Mackenzie Christine (2007). Creating Our Future: Workforce Planning for library 2.0 and Beyond page 3 Aplis 20(3) Australasian Public Libraries and Information Services (20)3
- Makori E. (2012) Bridging the Information Gap with Patrons in the University libraries in Africa.The case of investments in web 2.0 systems. Library Review 61(1)30-40
- Meneja, P.S. and Abunga, A. K. (2012). Application of Web 2.0 tools inDelivering Library Services: A Case of selected Libraries in Tanzania. Paperpresented at SCECSAL XXth conference hosted by KLA on 4th-8th June 2012 atLaico Regency Hostel Nairobi, Kenya.
- Maness, J.M. 2006. "Library 2.0 theory: Web 2.0 and its implications for libraries,"

- Webology, 3(2) Articles 25, available at: http://www.webology.ir/2006/v3n2/a25.html
- Muneja P.S. and Abungu A.(2012) Application of Web 2.0 Tools in Delivering library Services .A Case if Selected Libraries in anzania.www.scecsal.viel.co.ke/.../Application\_o f Web 2.0 tools in Delivering.
- Penzhon C. Quality through Improved service: The Implementation of Social Networking Tools in Academic
  Libraries.www.iatul.org/doclibrary/public/Conf
  Proceedings/.../Penzhorn-text.pdf
- Pienaar, H., & Smith, I. (2008). Development of a library 2.0 service model for an African library. *Library Hi Tech News*, 25(5), 7–10. Retrieved from /journals.htm?issn=0741-9058&volume=25&issue=5&articleid=1738012&show=html
- Rutherford, L. (2008). "Building participative library services: the impact of social software use in public libraries," *Library Hi Tech*, 26(3): 411-423.
- Tripathi, M. & Kumar, S. (2010). Use of web 2.0 tools in academic libraries:Reconnaissance of the international landscape. *The International Information &Library Review*, Vol. 42 No. 3, pp.195-207.
- Walia P. & Gupta M. Application of Web 2.0 tools by national libraries *Webology* 9(2) 6-7
- Wordofa, Kebede H. (2014) Adoption of Web 2.0 in academic Libraries of Top African Universities. Electronic Library 32(2)