

WEB 2.0 IN NIGERIAN UNIVERSITY LIBRARIES: A LITERATURE REVIEW

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ABSTRACT: In this article, the author reviewed literature on Web 2.0 in Nigerian university libraries. Web 2.0 is not just commendable, it is necessary and for to service patrons without it in this century is to be left behind in information provision. Library users presently are increasingly becoming technologically inclined. They expect local services to be virtually presented and want information at their beck and call for their individual fulfillment. Web 2.0 is a necessity for librarians because it offers feedback and comment opportunities that allow them to feel engaged with patrons and other colleagues professionally. It is an inexpensive and effective way of interacting with patrons that has never been possible before. Web 2.0 is much more than a mirage, it is real. It is a new and an innovative attitude, a total values system and offers new ways of doing library work. The various manifestations of web 2.0 such as Blogs, Instant Messaging (IM), Flickr, Wikis and Really Simple Syndication (RSS) and challenges to deployment in university libraries were discussed. Deploying Web 2.0 could be frightening but it is necessary that as information professionals, librarians should know the potentials of Web 2.0 if we are to be relevant and ably harness our users' astuteness.

Keywords: web 2.0, Nigeria, university library, manifestations of web 2.0

INTRODUCTION

At conferences, organizational offices, and in fact, in every opportunity in the library world and at the reference desk a dynamic model for library service is being discussed. If you and your library staff are not among those already discussing web 2.0, know that you have been left behind. Web 2.0 could give a new lease of life to the way we serve and interact with our esteemed patrons. It is a new revolution in the way libraries work together with their patrons. Variations in technological developments on the Web have had a major influence on these modifications (Huvila, Holmberg, Kronqvist-Berg, Nivakoski, & Widén, 2013). The developments have also placed new ways of doing things by librarians' using their competencies and skills.

More concisely, writes (Notess, 2006) of the Web 2.0 concept represents a new trend of Web skills used to create more interactive and simple Web sites using recent technologies. Web 2.0 model is an arrangement for separating some of the current Web from that of the preceding era. About two decades ago there were many Web 2.0 technologies, but the present crops of Web 2.0 sites combine those technologies in different ways. For example, most Web 2.0 sites are interactive, with the capacity to without difficulty edit and transport objects. According to a book titled *Library 2.0: A Guide to Participatory Library Service* by Casey and Savastinuk (2016), the notion of participatory librarianship implies that library users and faculty members are important factors in relation to what the library is, does, and offers. This information comes from real world practice. With Library 2.0, a greater number of libraries would be afloat in the face of the types of budget cuts they have experienced in the last decade. In early 2000, public libraries across the United States were not doing well as a result of not taking advantage of Web 2.0 technologies. This resulted in their calling on private companies to take over, or closing their doors altogether. When libraries fail to change with the times, and more importantly, fail to even ask their users what kind of library they want, there will be no one to engage policy makers when funds are redirected from library services. United States of America is not an Island in this regard. Libraries in Australia have started employing participatory librarianship to make policy makers create the library the people want. As a result, the mentioned libraries are busier than ever. Bringing the community together is what Library 2.0 is all about just like the Fayetteville Free Library, New York.

Due to technological advances, libraries have enabled the creation of new services that before were not possible. Some of these new services are downloadable media, virtual reference, and personalized OPAC interfaces. These technologies have given libraries the capacity to offer enhanced, customer-driven service opportunities. The main thrust of web 2.0 is patron-centered modification. It encourages constant and focused change by allowing patron involvement in the establishment of virtual and physical services they want, and regularly appraising services. Web 2.0 reaches out to new users and better serve current ones through enhanced patron-driven contributions. Web 2.0 by itself is a step toward better serving our users because it is through its implementation that we can reach Library 2.0. In the current library world, particularly in academic libraries, we are used to focusing our attention and services on those users we previously know. Casey and Savastinuk (2010) quoting Michael Stephens explains on ALA TechSource, "As librarians, we must remember all our users." Libraries have formed the habit

of providing the same services and programmes to the same users and are at ease with our provisions and remain unchanged. Stephens believed when thinking about this new model for library service, that “Library 2.0 will be a meeting place, online or in the physical world, where library users’ needs will be satisfied through information, entertainment, and the ability to create own information resources thereby contributing to the ocean of content out there.”

In what is Web 2.0? O’Reilly (2005) discussed the harnessing of the collective intelligence of everyone who uses a product or service. In a virtual environment, this takes the form of user-crafted social networks, feedback and user evaluations. Sites such as Facebook, Amazon, Twitter, Flickr, and MySpace rely on high levels of user involvement to increase the value of the product and service (Imran, 2011). Other ways to involve patrons and introduce new content to them are through Blogs and wiki. Casey and Savastinuk (2010) asserted that in Philadelphia, Temple University Library employs blog to provide a place for “news update, events, and chatting.” Ann Arbor District Library (AADL), MI, went a step further and turned its Web page into a blog (a chance to form user community and also quickly respond to feedback). In Saint Joseph County Public Library in South Bend, IN, the resourceful librarians used open source wiki software to create a successful subject guide that facilitates patron opinion and feedback.

Web 2.0 provides library clientele participation in the services libraries offer and the manner they are used and they will be able to employ library services to their own needs and advantage. In fact, the use of Web 2.0 applications in libraries has increased. This is due to the fact that they are easy to use, intuitive, and enable the direct and speedy online publication as well as dissemination of user content (Schneckenberg, 2009). Basing their argument on Clausen (1999), Chua and Goh (2010) highlighted four activities of the library to include information acquisition, dissemination, organization and information sharing with relevant web 2.0 tools.

To increase your library’s visibility, appeal and worth, consider implementing customizable web 2.0 services. Imran (2011) indicated that web 2.0 model put together our users’ knowledge and uses it to enhance and advance library services. User remarks, tags, and evaluations feed user-created content back into these web sites and this creates a more informative product for successive users. In the course of creating customizable services you should also consider user privacy. Libraries and their librarians should be wary of protecting users’ privacy with technology-based services as they are with traditional, physical library services. Some ways through which privacy could be preserved, includes allowing anonymous comments, remarks and tagging within the catalog. For example, library patrons should not be told to identify themselves publicly before they are allowed in online services.

Your library could already be amongst those offering some services that can be termed Library 2.0, if your library combines Library 2.0 options with an outline for constant modification and patrons’ input included into other procedures within your library (Ata-ur-Rehman & Shafique, 2011). Due to the fact that every library has a different starting point, the essentials of the Library 2.0 model will be different for each library as system. You will be able know how library 2.0 model will work for your library through cooperation between community of users (Imran, 2011).

Web 2.0 and some of its Manifestations (Typology)

Bower (2015) and Imran (2011) made a brief explanation of few Web 2.0 applications below:

- Blog or Web Log is a major application of Web 2.0. Adomi (2011) described weblog as a certain type of website where the information is presented in a persistent sequence of dated entries (it is also called an online diary). It can be created by an author and supported by a community of authors. Blogs has the characteristics of having brief entries but presented in reverse order and chronological. In terms of update, the webpage can be updated anytime – hourly, daily, weekly or monthly as required (Kejewski, 2007) and some blogs permits visitors to add remarks/comments to the records (Morris & Allen, 2008). The blogs are types of publication (Maness, 2006) and the process of publication of the ideas on the web and to get the comments from other users of web is called blogging. Clyde (2004) observed that blogs though dating back late 1990s is a one-click process of publishing posts and is a recent Internet occurrence. Some libraries the world over are using blogs for ease of information dissemination to defined patrons. According to Clyde (2004) blogs are the fastest emergent means of information dissemination when compared with the World Wide Web. Blogs can be formed as a single-person work but some are created and published as joint effort.
- Instant messaging is a form of text-based actual communication on the Internet that has already been accepted with enthusiasm by the library community. Instant messaging permits users to retain a list of

individuals that they intend to network with. Mannes (2006) noted that Instant Messaging (IM) allows actual text communication amongst persons and that libraries have started using it to provide "chat reference" services, where patrons can talk with librarians just as in a face-to-face reference situation. Messages can be sent to any of the individuals in your list that is sometimes called a buddy list or contact list, in as much as that individual is connected. The moment a message is sent or in sending a message, it opens up a small window where you and your friend at the other end can type in messages that both of you can comprehend. IM involves the use of a client programme that connects with an IM service and differs from e-mail because conversations are in real time. A majority of services provides a "presence information feature", showing whether persons on one's list of contacts are currently online and also available for discussion. IM is an indispensable device which may help librarians to provide library services. Maness (2006) claimed that IM was initially Web 1.0 application because it often requires the downloading of software but now, IM can be classified as Web 2.0 application because IM is accessible through browsers from most of service providers like MSN, Google Talk, etc. IM is very much in use for online reference services in libraries. 'Ask a librarian service' is provided by instant messengers all over the world. For example, a study of top 100 university libraries revealed that IM features have extensively been used in libraries to provide quick online reference services using IM technology (Harinarayana, 2010). IM, noted Currie (2010) can be utilized to offer virtual reference services by engaging staff at public desks during night shift and through weekends when the library is closed for other services.

- Wikis, like email has revolutionized cooperation within enterprise in terms of communications. Wikis allow several users to create, revise and connect multi-page websites using their web browser, and instructors and students use this to generate collaborative information sources and for project terminals (Bower, 2015). A Wiki is an additional example of collective creative effort. Numerous patrons the world over can build information sources via this application. An example of this kind of collaborative work is the Wikipedia. Through the wiki service, a library can permit social collaboration between librarians and patrons, by making the study group room virtual (Maness, 2006). Patrons in libraries can help generate files and organize tutorials with Wikis which are the combination of many other technologies like tagging, messaging and blogging (Maness, 2006). Wikis could be employed in information and document management, project management, planning, conferences, directories, and many more. Wikis are simple to use without exceptional preparation or adequate practical expertise. Bower (2015) reported in his study that 33% of institutions are already employing wikis and projected that another 32% are strategizing to do so without further delay.
- Another Web 2.0 technology which enables patrons to bring updates and feeds from other websites is called Really Simple Syndication (RSS) or Rich Site Summary. A very simple instrument that is used to get the newest stories, keep news groups informed and latest information in magazines and journals. According to Obasola and Mamudu (2015) RSS can be used for current awareness services where patrons receive signals on newly acquired resources and services provided by the library. It is an arrangement for providing repeatedly, changing network content. In many news websites and weblogs, online publishers provide their content as an RSS Feed to any person that has interest. It resolves issues for people who constantly use the web and permits you to without difficulty stay connected and up-to-date by retrieving the current content from the sites you desire. Advantages for using this too are that your time is saved by not visiting each website separately and your privacy is also ensured. RSS feeds abound in many types of web sites which may be of use to information specialists. For easy viewing in the workplace, professionals use newsreader to aggregate syndicated web content such as podcasts, news headlines and blogs in a single location. Some libraries that discovered effectiveness in blogs and wikis are recognizing that RSS is necessary in introducing their content to patrons. Feed from a site are created that readers can then add into an aggregator to create one access point for numerous sources (Davison-Turley, 2005). In a recent study of Australian University Libraries, Linh (2008) reported that RSS was found the most widely applied technology.
- Flickr is a virtual image distribution application. It is employed to share and distribute images in online communities. It is also a good source for sharing and distributing various events by means of images and image collections. The aforementioned lets users to upload, distribute and identify images by keywords. These labels or identifiers are very useful for recovering important images (Angus, Thelwall & Stuart, 2008). Often, Flickr is put behind Facebook and Twitter in terms of ranking. However, there is no healthier means to figure out a robust communal system without Flickr (LIS, 2016). In line with the above, Hooser (2013) noted that when social media professionals advance /promote a campaign, various persons may go to their habitual outlets - twitter and facebook with good reasons. This is because these social media network outlets easily spread to large and busy audience. Flickr is

repeatedly ignored but it is an effective social media network where importance is placed on visuals such as photos and short video clips. Patrons can bring together their Flickr photos together into "albums" which are flexible than the customary folder-based process of forming files. Flickr photo album represents a type of clear-cut metadata rather than a physical order. Flickr albums could be arranged into "collections", which can themselves be additionally being structured into higher-order collections (<https://en.wikipedia.org/wiki/Flickr>, 2016).

Awareness of Web 2.0

The Chartered Institute of Library and Information Professionals in Scotland and Scottish Library and Library Council (n.d.) observed that the universal characteristic of web based services indicates that libraries can service a vast audience through serving patrons in the virtual arena than would be possible at a fix place. Instead of just waiting for users to visit us, the library can create online spaces in the social media websites where interaction can begin. This presents opportunities to appeal to user groups, such as teenagers who are less likely to visit the physical library building. Improved awareness of library services and contribution to a progressive image laundering, may lead to increased visits.

In a study by Atuloma (2010) 67.7% of the surveyed subjects were hearing about library 2.0 for the first time, while only 9(29%) were aware of the technology before the study. In short, a summary of the results indicated insufficient awareness and understanding of what constitutes web 2.0. The subjects were equated based on institutions. Analysis of variance for knowledge yielded ($F=.257$; $P=.775$), perceived support for library 2.0 ($F=1.77$; $P=.188$) and attitudes towards library 2.0 ($F=.936$; $P=.404$) In fact, there were no significant variations between institutions.

Xu, Ouyang and Chu (2009) surveyed 81 academic libraries in New York state and the study revealed that less than half (42%) of the libraries adopted one or more web 2.0 tools such as blogs and that the implementation of the tools varies in individual libraries. Instant messaging takes the lead in terms of frequency of use, followed by blogs and RSS. It can be inferred from the above that few libraries are aware of the use of web 2.0 tools.

Obasola and Mamudu (2015) in their study established that the implementation of web 2.0 technologies in information services delivery in Nigerian academic libraries is still at its infancy. This is because only a few of the libraries studied have a suitable structure for the implementation and combination of these tools for information services delivery. It was also found in the study that most of those in this category, that is, the libraries implementing web 2.0 tools are privately owned institution of higher education. This means that implementation of web 2.0 technologies on the websites of federal and state universities in Nigeria is not progressing like those of their counterpart in the private universities.

The various uses to which Web 2.0 tools could be employed are knowledge sharing and management, user services, communication, making yourself heard, knowledge gathering, campaigning/social reform, community building, experience tracking and as a newsletter (Siemens, 2002). However, lamented Adomi (2011) the use of blogs for library services is not yet popular in most Nigerian libraries. The reasons for this ugly situation Adomi continued, are inadequate awareness of the existence of the technologies and/ or how to use them even when they are freely available on the web, inadequate network technologies for service provision and technology skills among others. The excuses notwithstanding, the time has come to embrace the use of web 2.0 technologies, especially weblogs to enhance library services in Nigeria.

Challenges to deployment of Web 2.0 technologies

Atuloma (2010) citing Njoku (2008) indicated that the problems facing the information profession in Nigeria and Africa as a whole are linked to:

- Energy problem: incessant electricity stoppages restrict all computer linked activities such as the use of Blogs and other online tools.
- Inadequate communication infrastructure, and
- Inadequate funding: as a result, information and communication technology infrastructures are accessible only to limited privileged organizations in private sector, institution of higher education, research institutes and a few public institutions.

The above challenges could hamper the implementation of web 2.0 in Nigerian libraries. Also, Krubu, Okoh, Ebinuwele and Odion (2012) in their study of the extent of use of Information and Communication Technology

(ICT) by undergraduates in Edo State, Nigeria reported that institution of higher education experienced the challenge of poor infrastructure, as a result, unable to fully meet the information needs of students regarding full access to ICT technologies. They suggested that that internet services should be provided in all the faculties to aid student academic work.

Another major challenge is the creation of new librarians. This encompasses transforming the present crop of librarian from an information provider into a knowledge worker, that is, from somebody who only provides access to information to somebody who vigorously lends a helping hand to the user in obtaining the desired information. The transformation would be exhibited in a variety of ways and roles for librarians. Roles such as information literacy instructors, information creators and portal publishing supervisors, community information specialists and coordinators, advisors for children's culture, consumers' rights advocates, and subject experts in completely all fields (Adomi, 2015).

On the foreign scene, Arif and Mahmood (2010) in Pakistani noted that there was scarcity of literature on the usage of Web 2.0 applications. Only one study according to Arif and Mahmood (2010) has been conducted to date to explore the adoption of Web 2.0 technologies in Pakistani libraries. Their study has revealed that inadequate Internet skill was the main factor militating against the adoption of Web 2.0 technologies in the libraries. One hundred and sixteen, 116 of the respondents used Web 2.0 tools to deliver library services. Instant messaging and social networking are the major services to which web 2.0 technologies were used for in the study. Half of the respondents used electronic groups, blogs and Wikis. Three respondents used podcasting services, while Forty-five of the respondents used RSS. They also found that inadequate computer and computer literacy skill and inadequate Internet facility were the key limitations to implementing Web 2.0 technologies in the libraries.

CONCLUSION

Web 2.0 is the application of interactive, collaborative, and multi-media web based technologies to web-based library services and collection (Maness, 2006). Web 2.0 is about new and innovative ways of creating, working in partnership, editing and distributing user-generated content virtually. Web 2.0 can be realized only by adding innovative functions and structures directly into the content (Abram, 2005).

According to Casey and Savastinuk (2010) at present, libraries have a penchant to design, implement and fail to recall or forget. Web 2.0 technologies tries to modify this line of thought by developing a timetable that includes frequently soliciting patron response and appraising and updating services. New and current library services should be reexamined regularly to make sure that they are still meeting projected aims. Also, outdated library services should be appraised to determine if any feature requires modernizing.

You don't use what you don't know about. In libraries, applying web 2.0 is a question of awareness. Is your library prepared for this kind of change in technology? Without mincing words, the answer is no. Librarians in this part of the world seemed not thinking along this philosophy, but there is the need for us to change. Innovative change in the way information is generated and shared is the main aim of the Web 2.0 discussion, and this is the reason it is critical. Our contents are useless if our libraries are kept under lock and key on our own web sites and don't get it out there for patrons to use as they want to.

RECOMMENDATIONS

Deployment of web 2.0 tools would create a significant as well as extensive transformation in the advancement of academic libraries in Nigeria. Libraries in third world countries must therefore endeavor to adopt the technology. Although, lots of the talk about web 2.0 involves technology that is capital intensive, university libraries with inadequate technology funding can gradually work toward web 2.0 adoption and implementation. When technology choices are restricted, consider physical tasks that will better serve present patrons as well as anticipated ones. You can develop ideas for new, affordable offerings, as well as physical services from surveying both current and potential patrons, other libraries, and through staff feedback. Deploying Web 2.0 could be frightening but it is necessary that as information professionals, librarians should know the potentials of Web 2.0 if we are to be relevant and ably harness our users' astuteness.

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