

# **LIBRARY 2.0: AN APPLICATION FOR INNOVATIVE LIBRARY SERVICES**

– Swarupanjali Biswal and Nilaranjan Barik

## **INTRODUCTION**

Library 2.0 is the product of the application of social media in libraries. Library 2.0 was first coined by Michael Casey in his blog “Library Crunch”. Library 2.0 is a new way of thinking about libraries and follows the golden rule that dynamically deals with interacting with and listening to users to create more user-centered services both physical and technology related and the willingness to enhance library services through user collaborations.”

Development of library information services through user participation is the key feature of Library 2.0 where constant updates and evaluation of library services are ensured to better serve the needs, demands, desires and wisdom of varied user communities. Library 2.0 is said to be more interactive and user centered communication technologies and enables participatory creation of knowledge and information sharing in simple and convenient way.”

The “term is now widely used and interpreted, but Library 2.0, essentially, is not a web of textual publication, but a web of multi-sensory communication. It is a user-centered Web in ways it has not been thus far. This characterization of the current state of the Web is at times contended, and though the clear delineation between the first and second Webs is here admitted to be rather arbitrary, it still must be recognized that the Web is indeed evolving into a more interactive, multi-media driven technological space, and this understanding of the term is used in this paper.”

The “implications of this revolution in the Web are enormous. Journals and other traditional literatures have yet to fully address the concept, but the application of Library 2.0 thinking and technologies to library services and collections has been widely framed as “Library 2.0. Similarly, the first generation of online library instructions was given in text-based tutorials that are static and it neither respond to user’s needs nor allow users to interact with one another. These, however, have begun evolving into more interactive, media-rich tutorials using animation programming and more sophisticated database quizzes. Libraries are already moving into Library 2.0, but the move has only just begun.”

## **LIBRARY 2.0**

World Wide Web (W3) is the landmark success in the history. The term Library 2.0 was firstly coined by Tim O’ Reilly and Dale Dougherty O’ Reilly, The Vice President of O’ Reilly Media in 2004 in a conference brainstorming session, between O’ Reilly and MediaLive International. Library 2.0 suggests a new version of the World Wide Web (WWW). Library 2.0 site may allow users to interact and collaborate with each other in society. Tim O’ Reilly defines Library 2.0 on his website as follows:

"Library 2.0 is the business revolution in the computer industry caused by the move to the Internet as platform, and an attempt to understand the rules for success on that new platform. Chief among those rules is this: Build applications that harness network effects to get better the more people use them."

Wikipedia described as, Library 2.0 generally refers to a second generation of services available on the World Wide Web that let people *collaborate*, and *share* information online and hosted services such as Social- Networking Sites (SNSs); Wikis; Blogs; and Folksonomies; which aim is to facilitate creativity, collaboration, and sharing among users." These have led to the development and evolution of Web-based communities and hosted services, such as social-networking sites (i.e. Facebook, MySpace), video sharing sites (i.e. YouTube), wikis, blogs, etc." Library 2.0 is difficult to define because it is not really a thing, but an approach, or shift, in how we use the Web we already have.

The key is a change to a more active user who actually creates content rather than just passively receiving it. This change in how we experience the Web mimics a parallel shift occurring in education.

The application of Library 2.0 thinking and technologies to library services and collections has been widely framed as "Library 2.0." With Library 2.0, library services are frequently evaluated and updated to meet the changing needs of library users. Library 2.0 also calls for libraries to encourage user participation and feedback in the development and maintenance of library services.

The active and empowered library user is a significant component of Library 2.0. With information and ideas flowing in both directions – from the library to the user and from the user to the library – library services have the ability to evolve and improve on a constant and rapid basis. The user is participant, co-creator, builder and consultant – whether the product is virtual or physical.

## USE OF LIBRARY 2.0

Library 2.0 is the term used to describe a variety of web sites and applications that allow anyone to create and share online information or material they have created. A key element of the technology is that it allows people to create, share, collaborate & communicate. It can also be an effective way to communicate and interact with students and research colleagues. There are number of different types of Library 2.0 applications including wikis, blogs, social networking, folksonomies, podcasting & content hosting services. Many of the most popular websites are Library 2.0 sites such as Wikipedia, YouTube, Facebook, MySpace, Flickr.

**Search:** Weblog search, friends search on Facebook, search presentations on various topics, search snaps on Flickr and all search features. Search the case of finding information through keyword search that makes the platform valuable.

**Links:** Library 2.0 all links as web pages of periodicals online book links, blog links is possible through Library 2.0 the best pages are the most frequently linked to.

**Authoring:** The ability to create constantly updating content over a platform i.e. shifted from being the creation of a few to being the constantly updated, interlinked work. In Wikis the content is iterative in the sense that the people undo and redo each other's work. In Blog content and comments of individuals are posted and accumulated over time.

**Tags:** Categorization of content by creating tags that are simple, one-word descriptions to facilitate searching and avoid rigid, pre-made categories.

**Extensions:** Automation of some of the work and pattern matching by using algorithms e.g. amazon.com recommendations.

**Signals:** In RSS, users are notified about any change in the content through e-mail.

**AJAX** (Asynchronous Java Script and XML): Library 2.0 tools are based on Ajax technologies as Java and XML for creation of the web technologies AJAX is important.

**API** (Application Programming Interface): Library 2.0 has Application Programming Interface, so it is very easy to use and get required information.

**Virtual Architecture:** Library 2.0 has virtual architecture for display information. It is totally online function for web user.

## CHARACTERISTICS OF LIBRARY 2.0

According to Best Library 2.0 has essential characteristics to identify its usefulness in information society. These characteristics are as:

**Openness:** Library 2.0 is open for all types of people, to share ideas and views on various topics. The world of Library 2.0 has only become possible through a spirit of openness whereby developers and companies provide open, transparent access to their applications and content.

**Networked Data:** Library 2.0 is varying participative in nature and in the network data is accessible.

**Participative:** Library 2.0 is varying participative in nature each and every tools of Library 2.0 require participation from the end user. It allow user to share and participate as blogging sharing files of uploading snaps.

**Sharing in Nature:** Tools is share ideas with all created groups and can share views that is benefits to create library online community.

**Change:** Change is eternal. As human nature change the Library 2.0 face could be change because it depends upon human nature of work types of ideas and views.

**Informative within Groups:** Web tools informative in nature every sort of information we can put and share within our community.

**Communicative within Groups:** Library 2.0 is also communicative because we can communicate ideas, signs, and symbols in to the created groups.

**It is user-centered:** Users participate in the creation of the content and services they view within the library's web presence, OPAC, etc. The consumption and creation of content is dynamic, and thus the roles of librarian and user are not always clear.

**It provides a multi-media experience:** Both the collections and services of Library 2.0 contain video and audio components.

**It is socially rich:** The library's web-presence includes user's presences. There are both synchronous (e.g. IM) and asynchronous (e.g. Wikis) ways for users to communicate with one another and with librarians.

**It is communally innovative:** This aspect rests on the foundation of libraries as a community service, but understands that as communities change, libraries must not only change with them, and they must allow users to change the library. It seeks to continually change its services, to find ways to allow communities, not just individuals to seek, find, and utilize information.

Library 2.0 technologies allow libraries the opportunity for more outreach activities and customizing their online presence for their patrons, helping create allow for organizational customization and increase participation by library users. In this regard Dan Sperring (2008) states that, "Library users are there for one common reason, to find information and if we don't provide them with that they will go elsewhere to find it."

## BENEFITS OF LIBRARY 2.0

There are some benefits of Library 2.0 are as under:

- Maximize impact of and engagement with ideas.
- Allowing organization to focus on their strength and small institution to engage on more equal terms.
- Promotes library services and resources.
- Maximize impact of and engagement with ideas.
- Allowing organization to focus on their strength and small institution to engage on more equal term.
- A very quick communication can possible with the library staff.
- Library can easily get users feedback in minimum span of time.
- It can keep update to library's users regarding its daily activities.
- Multimedia data can be accessing by user and able to give feedback.
- Users can have chat referencing/instant messaging with library staff.
- Users can create content.
- Users can comment on other's content.

## USEFUL TOOLS FOR LIBRARY 2.0

The beauty of Library 2.0 and Library 2.0 is the level of integration and interoperability that is designed into the interface through your portal or intranet. The technologies listed in Library 2.0 such as Blogging; Wikis; RSS; personalization, Social Bokkmarks; Social Networking Sites (SNSs); Images, Photograph Sharing; Video- Sharing; Podcasting; Mahups; Tags; Folksonomies and Tag Clouds etc. :

- **Blogs:** The term Weblog (or blog in short) was proposed by Jorn Barger in 1997. The blog included the web pages called posts which published chronologically with the most recent first, in journal style. WordPress and Movable type are the most widely used blogs software. Linking is another important aspect of blogging. Many libraries use blogs to update users with news, events and other information.
- **Wikis:** The first wikis was developed by Ward Cunningham in 1995. Wikis enables collaborative editing and user participation. Wikis means, 'Wiki Wiki' "Super fast" in Hawaiian phrase. Wiki support hyperlinks, cross-links and internal pages on the fly. Wikis features are included: Wiki Markup Language, Simple Site Structure and Navigation, Simple template, supporting of multiple users, built-in search features and simple workflow.
- **RSS (Really Simple Syndication):** RDF site Summary or Rich Site Summary is an effective tool for filtering and keeping up with information. RSS is an XML file that summarizes information items and links to the information sources. Using RSS, users are informed of updates of the blogs or web sites which they're interested in. The best known aggregators in the field of RSS include Google Reader, Bloglines and Feed Reader.

- **Social Bookmarking:** This site allows users to organize and share links to websites. It is a tool which allows users to store, organize, search, manage and share their webpage bookmarks. With the Internet connection access availability, the users can access their bookmarks anywhere. Examples include: Reddit, StumbleUpon and Digg, Delicious and MyYahoo etc.
- **Social Network Sites (SNSs):** The main purpose of SNSs is to connect people. MySpace; Facebook; Delicious; Frappr, and Flickr are networks that have enjoyed massive popularity in Library 2.0. MySpace and Facebook enable users to share themselves with one another, Delicious (Del.icio.us) enables users to share Web resources and Flickr enables users the sharing of pictures. Frappr is a bit of a blended network, using maps, chat rooms, and pictures to connect individuals.
- **Mashups:** Web mashup is a web site that combines information and services from multiple sources on the web. Mashups can be grouped into seven categories: mapping, search, mobile, messaging, sports, shopping, and movies. Mashups is easier and quicker to create mashups than to code applications from search in traditional ways; this capability is one of the most valuable features of Library 2.0. Mashups are generally created using application programming interfaces.
- **Podcast:** Podcasts are audio contents available on the internet that can be automatically delivered to a personal computer or MP3 player. Interview or short presentations in the form of MP3 audio file attached to a blog post and syndicated via RSS system.



Figure 1. Useful tools for Library 2.0

## USE OF SOCIAL MEDIA IN THE LIBRARY

Social media is playing a significant role in helping libraries stay relevant in our ever-growing digital society. Social media has the potential to facilitate much closer relationships between libraries and their patrons.

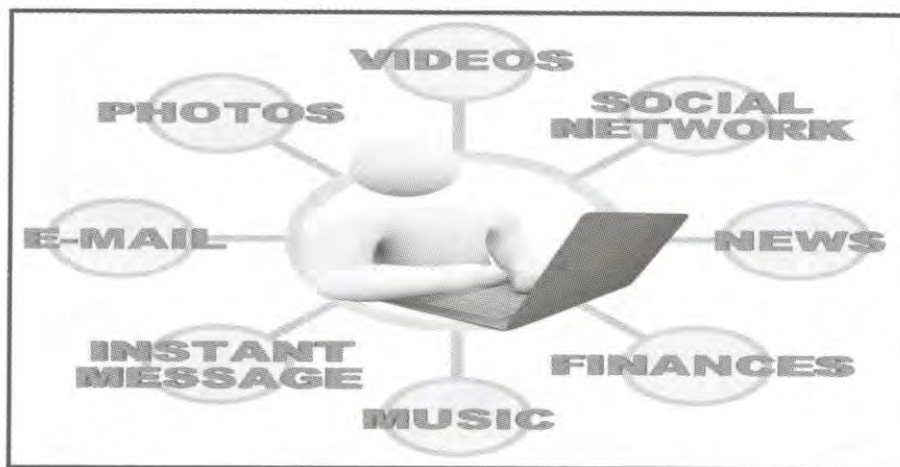
Current usage of social media by the library community generally remains ad hoc and somewhat experimental, but the uptake of these tools is accelerating, and they will likely play an increasingly important role in library service provision and outreach in the future.

Using social media can be an effective way for academic libraries to connect with their user community .By posting updates on Facebook, libraries can inform their users about the library's programs and services. They can invite students to attend training sessions, post practical information about the library's opening times, link to new and existing print and online resources, and update the university community about any new developments.

'Followers' can engage with the library by commenting on posts and sharing them with their friends. Facebook, twitter, Instagram, Pinterest, YouTube are the interactive medium. Libraries should address their audience in a formal but friendly way, and encourage them to engage with their page by inviting them to share posts and leave comments.

**Libraries are using social media to share events and pictures, educate people about services, highlight their collections, and support other libraries.** Social networks are perhaps the most promising and embracing technology discussed here. They enable messaging, blogging, streaming media, and tagging.

MySpace, FaceBook, Del.icio.us, Frappr, and Flickr are networks that have enjoyed massive popularity in Library 2.0. While MySpace and FaceBook enable users to share themselves with one another , Del.icio.us enables users to share Web resources and Flickr enables the sharing of pictures. Frappr is a bit of a blended network, using maps, chat rooms, and pictures to connect individuals.



**Figure 2: Use of Social Media in Libraries**

## CONCLUSION

There is no doubt that Library 2.0 is completely user-centered and user-driven. Library 2.0 is a mashup of traditional library services and innovation Library 2.0 services. Library 2.0 is a library for the 21st century, rich in content, interactivity, and social activity. Library 2.0 technologies and applications will constitute a meaningful and substantive change in the history of libraries.

There is virtual reality of the library, a place where on can't only search for books and journals, but interact with a community, a librarians, and share knowledge and understanding with them. Library 2.0, really, is merely a description of the latest instances of a long standing and time tested institution in a democratic society. Library 2.0 is not about searching, but finding; not about access, but sharing.

Library 2.0 recognizes that human beings do not seek and utilize information as individuals, but as communities. The heart of Library 2.0 is user-centered.

All together, the use of these Library 2.0 technologies and applications will constitute a meaningful and substantive change in the history of libraries. The library's collection will change, becoming more interactive and fully accessible. The library's services will change, focusing more on the facilitation of information transfer and information literacy rather than providing controlled access to it. This paper posits four conceptual underpinnings to Library 2.0: it is user-centered; a multi-media experience; socially rich; and communally innovative.

It also espouses a focused definition for the term: "The application of interactive, collaborative, and multi-media web-based technologies to web-based library services and collections." It is, finally, also necessary to consider that the Web will continue to change rapidly for some time. Library 2.0 is an early one of many. Libraries must adapt to it, much as they did the Web originally, and must continually adapt for the foreseeable future.

## REFERENCES

- Casey, M. (2006). LibraryCrunch: Bringing You a Library 2.0 Perspective. Retrieved from: <http://www.librarycrunch.com>
- Choudhury, N. (2014). World Wide Web and its journey from Web 1.0 to Web 4.0. *International Journal of Computer Science and Information Technologies (IJCSIT)*. 5(6), 8096-8100.
- Crawford, W. (2006). Library 2.0 and Library 2.0. *Cities & Insights*.
- Maness, J. M. (2006). Library 2.0 The next generation of web based library services. London, *Journal of the World Book Community*. 17 (3).
- Maness, J. M. (2006). "Library 2.0 Theory: Library 2.0 and Its Implications for Libraries." *Webology*, 3 (2). Retrieved from <http://www.webology.org/2006/v3n2/a25.html>
- Sindhu, R. A. & Chauhan R. M. (2016), "The Movement of Web from Web 0.0 to Web 5.0: A Comparative Study." *International Journal of Multidisciplinary Research and Development*. Volume 3; Issue 3; March 2016. Pp 76-179.
- Sperring, D. (2008), "Libraries, the Internet, Library 2.0 and Library 2.0 one person library, 25 (2).
- Tebbutt, D. (2006). Is all the talk of Library 2.0 just a lot of codswallop? *Information World Review*, (221), 9-9.

## NOTES

1. <http://www.w3.org/People/Berners-Lee/ShortHistory.html>.
2. <http://www.w3.org>
3. <http://website-quality.blogspot.com/2010/01/web-40-new-webtechnology.html>, Hemnath
4. [https://en.wikipedia.org/wiki/Library\\_2.0](https://en.wikipedia.org/wiki/Library_2.0)
5. <http://www.ala.org/alcts/confevents/upcoming/webinar/121014>
6. <http://en.wikipedia.org/wiki/Web2.0>