



APPLICATIONS OF WEB 2.0 IN LIBRARY

S. S. Pradhan

Librarian

N.S. Science & Art's College, Bhadrawati

E-mail: ss.pradhan1@gmail.com

ABSTRACT

The use of ICT has opened a wide range of possibilities to libraries. Hence, the Impact of ICT tools and services which have influenced the library services. With the evolution of ICT, Web 2.0 which has dynamic, interactive and collaborative platform that facilitate exchange of information and knowledge amongst its users. Most of the Web 2.0 tools and services such as social networks, RSS feeds, blogs, podcasts video sharing, instant messaging, tagging and social bookmarking etc., are opening new avenues and giving libraries the ability to offer the improved, customer-driven services to the user. Similarly, it is also used to promote instant information services by librarians. The paper highlights the Web 2.0 concept, features, tools, services and applications of Web 2.0 in libraries.

Keywords: Web 2.0, ICT, Social Network, RSS Feeds, Blogs,

INTRODUCTION :

The application of ICT technologies increases day by day. With the development and adoption new ICT technology such as Web 2.0 which is generally associated with the web applications, which enables interactive user-centered design, interoperability, information sharing, and collaboration on World Wide Web (WWW). The applications developed using Web 2.0 can be shared among a number of users through Internet and can be used simultaneously by numerous users. A Web 2.0 tools include social networking sites, weblogs, wikis, RSS feeds, podcasts, photo-sharing, instant messaging, video sharing sites, Web applications, and mashups which allow users to interact and collaborate with each other in a socially as creators of user-generated content in a virtual community.

Now a day's Libraries and librarians all over the world are using Web2.0 technologies to promote services, share information, and engage with users and network with colleagues, on a global scale. The greatest impact of these tools is visible in the areas of information access and information dissemination. Due to use of web 2.0 tools the user community is potentially well connected with one another, therefore not only able to share the information but also contribute web content at the wider extent. It also helps to improves





awareness of library services and contributes to a progressive and modern image of library in digital world.

WEB 2.0

The term Web2.0 refers to the development of online services that encourage collaboration, communication and information sharing. It represents a shift from the passive experience of static "read only" web pages to the participatory experience of dynamic and interactive web pages. Web 2.0 concept highlights services that allow people to find and manipulate content, coupled with those that enable all types of media and services to be published and interlinked (or "mashed") in places that lots of people actually know about.

Web 2.0 tools such as social networking tools, RSS (Really Simply Syndication), Web blogs, Podcasts, Social book marking, Wiki's, Instant messaging, resource discovery tools, mapping services, web annotation etc. which helps and concerned with establishing and maintaining more fluid, more flexible and richer online connections between people, services and/or information.

Here are the three key aspects of Web 2.0

- **Interpersonal computing** - involving person-to-person interactions facilitated via websites that enable collaborative content creation, sharing and manipulation.
- **Web services** - involving application-to-application (and hence library-to- library) data and service exchanges facilitated by automated connections between web servers and other Internet technology.
- **Software as a service (SaaS)** - involving human (library staff and user) interactions with digital content facilitated by applications delivered over the web and that free the user from locally installed software.

FEATURES OF Web 2.0

Due to use of interactive features/ techniques of web 2.0 in a modern web application development which is all about creating a "community" for the users. This allows library to interact with their user. Typically Web 2.0 include some of the following features/techniques

- **Search:** the ease of finding information through keyword searching.





- **Links:** guides to important pieces of information. The best pages are the most frequently linked to.
- **Authoring:** the ability to create constantly updating content that is co-created by users. Wikis, the content is iterative in the sense that the people undo and redo each other's work. In blogs, it is cumulative in that posts and comments of individuals are accumulated over time.
- **Tags:** categorization of content by creating tags that are simple, one-word descriptions to facilitate searching and avoid having to fit into rigid, pre-made categories.
- **Extensions:** automation of pattern matching for customization by using algorithms (i.e. Amazon.com recommendations).
- **Signals:** the use of RSS (Real Simple Syndication) technology to create a subscription model which notifies users of any content changes.

FROM WEB 2.0 TO LIBRARY 2.0

The term "Library 2.0" was coined by Michael Casey and published on his blog, library crunch in 2006. Library 2.0 term is direct spin-off of the terms Business 2.0 and Web 2.0, suggest especially for public libraries, where many of the elements of Web 2.0 have applicable value within the library community, both in technology-driven services and in non-technology based services. Hence, Library 2.0 is the product of application of web 2.0 tools in libraries. Library 2.0 simply means making the library's space (virtual and physical) more interactive, collaborative, and driven by community needs by using web 2.0 tools. Development of the library and 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 user communities. 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 Web 2.0 tools now the part of the Library 2.0 which basically allowing the library services to operate in an interactive, collaborative atmosphere driven by community





needs and encourages synchronous social interactions between library staff and users. Tools such as Synchronous Communication (Instant Messaging), Content Delivery (RSS Feeds, News Feeds), Streaming Media, Collaborative Publishing Tools (Blogs, Wikis, Tagging etc.), and Social Networks are slowly becoming part of the library services. Many librarians and integrated library systems use these exciting tools to bridge the gap between the user and the information.

ADVANTAGES OF WEB 2.0 TO LIBRARY

Presently libraries and library professionals feel that web 2.0 technologies will be more helpful to library. Here are numerous advantages of Web 2.0 for libraries like

- Help in Improvement of the library's image
- It is powerful tool for raising the library profile worldwide
- Help to capture user's knowledge and deliver services to satisfy their needs
- Raise the level and quality of the service provided;
- Increased involvement of users and improved communication of the library with such users;
- Used for driving quick service feedback and targeting valuable information users and resources
- World-wide impact, at little cost and with wide access of information/knowledge
- Increase the flow of information from provider to viewers,
- It allows the user to actively participate online by means of blogging, sharing file or equivalent.
- Improvement in communication among librarians;
- Greater ability to find quick solutions to meet the needs of users;
- Improvement in shared knowledge and collaboration

WEB 2.0 SERVICES AND APPLICATIONS IN LIBRARIES

Applications of Web 2.0 in libraries change the collection development, content delivery, library services and many library activities with library web presence. Such impacts vary and depend on the type of applications and tools, their characteristics and functionalities, and the way they are used and kept.





Some of the important and most popular Web 2.0 tools which used in libraries and information centers are as follows

Wikis

Wikis are collaborative software applications that build web sites and to power online communities. It allows users to create and edit web content freely. Wiki supports hyperlinks and has simple text syntax for creating new pages and cross links between internal pages on the fly. No HTML knowledge is necessary. Much like a blog it makes creation of a web site easy. Several libraries have used the Wiki tool for providing different library services like answers to the users' enquiries and enable them freely edit text and post their point of view hence Wikis have also been called "electronic chalk boards". In addition, a wiki, as a library service, can facilitate the social interaction among librarians and the online user community. As users share information on wiki through discussions, comments, criticism, etc., a record of these discussions can archived for future reference. It also helps to building and creating subject guides, subject gateways, Create and maintains a user FAQ etc. Most famous of all wikis is Wikipedia.org

Blogs/Weblogs

A Weblog, or "blog", is a personal journal on the Web. A blog is a discussion or informational site published on the World Wide Web and consisting of discrete entries ("posts") typically displayed in reverse chronological order (the most recent post appears first). A blogger maintains blog with varied and unlimited information depending upon the purpose and nature of the blog where anybody can read and write their views and ideas without changing the original content.

In libraries it is used as a platform for in-house publication. Information published on the library blog may help the user community. Libraries can provide reference services through the blog where users can post their comments and queries and receive real-time responses from libraries. It also used as library discussion forums, marketing tool for the promotion of various facilities and library services among the user community and so on. Receiving comments and feedback about the various library services and library staff is another possible way to implement the blogging culture in libraries.





RSS (Really Simple Syndication) Feeds

The RSS stands for 'Real Simple Syndication' or 'Rich Site Summary'. Help to publish frequently updated information: blog entries, news headlines, audio, and video. RSS feeds enable publishers to syndicate data automatically. An RSS document (called "feed", "web feed", or "channel") includes full or summarized text, and metadata, like publishing date and author's name just like a Weblogs.

Libraries may apply this concept to provide the current awareness services to its user community, upcoming new items, services, and new content which have been added in the library collection and databases. By subscribing to the RSS feeds from the library website Updates on library services, events, exhibition etc. can be accessed. RSS saves the time of librarian and user community as librarian has choice which links can be distributed; and user has choice what to receive or accept.

Instant Messaging (IM)

Instant messaging (IM) is a type of online chat which offers real-time text transmission over the Internet. Instant messaging (IM), also known as synchronous messaging allows real-time text communication between individuals and groups, provide real-time text, which transmits messages character by character, as they are composed. generally used in SMS in mobile phone.

Most of libraries provide "chat reference services" where user can synchronously communicate with librarian, experts much as they would in a face to face communication. Instant messaging in libraries work best to get quick answers to brief reference queries.

Tagging

Tagging is described as the process by which the resources in a collection are assigned tags in the form of words, phrases, codes or other strings of characters. This allows users to add and change the data and metadata and at times give a local flavor to the data and metadata. The advantage of user tags is that it helps the data to be more easily searchable. This kind of metadata helps describe an item and allows it to be found again by browsing or searching. Tags are generally chosen informally and personally by the item's creator or by its viewer, depending on the system. The flexibility of tagging allows users to classify





their collections of items in the ways that they find useful. The process is instructive for the users as well as the providers, hence it makes the library service more democratic, affordable, collaborative, and more dynamic.

Social Networking Websites

A social networking service is a platform to build social networks or social relations among people who share interests, activities, backgrounds or real-life connections. Social networks are web-based services that allow individuals to create a public profile, to create a list of users with whom to share connections, and view and cross the connections on web, based upon the software that facilitate people to connect, collaborate, and form virtual communities via internet. Allow the user community to send e-mails, post comments, share audio and video files; take part in live chats, etc. It enable librarians and patrons not only to interact, but to share and change resources dynamically in an electronic medium. In libraries the user community builds the repository by uploading images, audio, video, documents, text, and linking them and discussing them. It helps for building network among the same interest group in discussing the Common interest. Social networking Websites provide a “virtual community” for people interested in a particular subject.

Web Podcasts and Vodcasts

Merriam Webster defines Podcast: a program (as of music or talk) made available in digital format for automatic download over the Internet. A podcast is a digital medium consisting of an episodic series of audio, video, PDF, or ePub files subscribed to and downloaded through RSS feeds (web syndication) or streamed online to a computer or mobile device.

By accessing media files over the internet such as direct download, or streamed webcasting Libraries might provide their important audio/video collections, rare books, documents, speeches of dignitaries and important personalities, classroom lectures, multimedia presentations to its user community via podcasting.

WEB 2.0 AND LIBRARIANS

In new age of information and communication technology library moves physical to virtual due to use of web 2.0 technologies. Hence, the libraries known as Library 2.0 and





the librarian should have called themselves as “Librarian 2.0”. Due to use of web 2.0 tools the user community is potentially well connected with one another and library to share the information and knowledge. Hence, Librarian 2.0 understands end users deeply in terms of their goals and aspirations, workflows, social and content needs, so today’s librarian strives to

- To know and understand the power of the Web 2.0 opportunities
- Learn the major tools of Web 2.0 and Lib 2.0
- Connect users to data sharing, expert discussions, conversations, and communities of practice and participates there as well
- Develop targeted federated search and adopts the Open URL standard
- See the potential in using content sources
- Connect everyone to library using new web 2.0 based technologies
- Use and develops advanced social network communities for library promotions globally
- Encourage user driven metadata and user developed content and commentary

CONCLUSION :

The emergence and use of ICT web 2.0 changes the trends in the use of World Wide Web technology and aim to enhance creativity, secure information sharing, increase collaboration, and improve the functionality of the library from physical to virtual (web library). Web 2.0 not only means new technologies, it also brings a fundamental change in how libraries operate. It offers diverse ways to add value to library services experience of dynamic and interactive web pages. Web 2.0 is making library services more interactive. Now A lot of libraries have already adopted and implemented the Web 2.0 tools for library web presence and utilize web 2.0 services and deliver, distribute library services widely.

REFERANCES :

1. *Advantages and Disadvantages of Web 2.0 Technologies.* (n.d.). Retrieved August 27, 2014, from <http://www.innovativeden.com/blogs/advantages-and-disadvantages-of-web-2-0-technologies/>





2. *Advantages of Web2.0 Development and Web 2.0 Development Services*. (n.d.). Retrieved August 25, 2014, from <http://www.tekritisoftware.com/web-2.0-development-and-web-2.0-development-services>
3. Imran, H. M. (211). Impact And Application Of Web 2.0 In Libraries: A Case Study Of 12 National Libraries Of The Developed Nations. *BJIS* , 41-56.
4. *Instant messaging*. (n.d.). Retrieved August 25, 2014, from http://en.wikipedia.org/wiki/Instant_messaging (n.d.). Retrieved August 28, 2014, from Instant messaging: http://en.wikipedia.org/wiki/Instant_messaging
5. Kataria, S., & Anbu K., J. P. (2009). Applications of Web 2.0 in the Enhancement of Services and Resource in An Experiment @ JIIT University Noida, India. *ICAL-LIBRARY SERVICES*, (pp. 583-589).
6. Lasic-Lazic, J., Zorica, M. B., & Bubas, G. (2009). Potential Uses of Web 2.0 Tools for Library Client Communication and Relationship Development. *Qualitative and Quantitative Methods in Libraries*, (pp. 1-8). Chania Crete Greece.
7. *Library 2.0*. (n.d.). Retrieved August 26, 2014, from http://en.wikipedia.org/wiki/Library_2.0
8. Majumdar, A., & Shukla, k. (2008). Web 2.0: Implications on Library. *6th International CALIBER*, (pp. 462-468). Ahmeda.
9. NAQVI, D. T. (2012). WEB 2.0 ENVIRONMENT AND ITS IMPACT ON LIBRARIES AND INFORMATION SERVICES. *International Journal of Digital Library Services* .
10. RSS .(n.d.). Retrieved August 28, 2014, from: <http://en.wikipedia.org/wiki/RSS>
11. Saha, N. C., De, S., & Paul, N. (2008). Application Of Web 2.0 In Library And Information Science: With Special Reference To RSS. *6th Convention PLANNER - 2008, Nagaland University*,, (pp. 415-429). Nagaland.
12. *Social networking service*. (n.d.). Retrieved August 27, 2014, from http://en.wikipedia.org/wiki/Social_networking_service
13. Stern, J. (n.d.). *Introduction to Web 2*. Retrieved August 26, 2014, from http://www.wlac.edu/online/documents/Web_2.0%20v.02.pdf
14. Thanuskodi, S. (2011). WEB 2.0 Awareness among Library and Information Science Professionals of the Engineering Colleges in Chennai City:. *Journal Communication* , 2 (1), 69-75.
15. *Typical Features of a Web 2.0 Site*. (n.d.). Retrieved August 26, 2014, from <http://www.bluestonethompson.com/node/7>
16. *Web 2.0*. (n.d.). Retrieved August 25, 2014, from http://en.wikipedia.org/wiki/Web_2.0

