

Significance of Web 2.0 Technology and its Application in Academic Libraries

Authors: Rashmi S. Tarade¹, Nilu Singh²

^{1,2}SIST-DIT, Babasaheb Bhimrao Ambedkar University (Central University), Lucknow, UP, India

ABSTRACT: The objective of this paper is to provide information of web 2.0 technology in context of academic libraries. Web 2.0 technologies have seen the sudden increase of social networking sites or tools, which provide a medium to connect with commonplace people. There are some social software applications are recent time are the most up-to-date properties of the internet users. In libraries the key ones include Social networking sites, wikis, IM, RSS, Blogs, Book marking etc. web 2.0 or Library 2.0 has changed the usual way of thinking regarding the occupation wherever academic library merely fit into place in creating the content as well as services in favor of user shifted to the area of user where librarian determination facilitate user to create them on behalf of themselves. The changes in web technologies have enabled libraries to produce novel interactive services such as virtual reference services, personalized interfaces and audio-visual media with the intention of be able to be downloaded by the user (group of people) irrespective of their substantial locations. In consequence these up-and-coming web based i.e. web 2.0 features are opportunity innovative avenues and giving libraries the facility to propose the enhanced customer services to the user communities.

Keywords: Web 2.0, library 2.0, Social Media, social networking sites.

I. INTRODUCTION

Initially web pages are static and these pages are read only therefore one way communication is possible and that time for creating web pages HTML (Hyper Text Markup Language) was used extensively for web-publishing. In recent time web 2.0 more popular due to their technologies and its features or we can say that www (World Wide Web) give a platform for developing web 2.0 applications [1]. Web 2.0 can be defined as that it is a modified/enhanced version of web 1.0. In web 1.0 there are read only or static web pages, online communication does not make available here while web 2.0 technologies give the facility to interact with users online and also contribute their web content. It developed for the purpose of user interaction, communication and web content sharing [2]. Web 2.0 tools and technology are Internet based services which consist of social networking sites, blogging sites, RSS, podcasting, wikis etc. There are lots of web services provided by web 2.0, now days which is more accessible and some are most useful for today's life such as-

Web 2.0 services	Web applications
Wikis	Peanut Butter, TikiWiki
Social networking websites	Facebook, My Space, LinkedIn
Micro blogging	Twitter, Tumblr
Social bookmarking	del.icio.us, Digg
Blogging	Blogger, Wordpress
Video & photo sharing	YouTube, Flickr
Open content online encyclopedia	Wikipedia
Social news websites	Reddit
social curation website(for sharing and categorizing images)	Pinterest

The examples given above are come in to the category of social media because of their services such as online information sharing and help to creating online communities [3]. Reason which make web 2.0 more accessible is that it is very easy to use and designed for broad applications areas. There is another Reason also it is accessible by those users who have little or else no technical proficiency. The fact about the internet history that it starts from Advanced Research Projects Agency NETwork better known as ARPANET and the origin of ARPANET is DARPANET (Defense Advanced Research Projects Agency). Up to 1992 internet was critically available for educational and government institutions, in the year of 1992 commercial accessibility of the internet was started [1].

For the term academic library two factors are mainly essential i.e. faculty and student. The services provided by library organization can be maintained by academic libraries and librarians as

per the requirement of their institutions. The responsibility of academic libraries organizations that they fulfill the necessity of student and faculty as per their requirement. There are many assumptions but we mainly assume these two which is more demanded for library user, the first is they want to work with faster accessibility and second stipulate of required technology services. Since library is in the every Institution so it is expected that library has make availability of good services, valuable content and staff expertise where user can take advantage from there. At present academic libraries can take the improvement from web 2.0 technologies and using their technology they able to fulfill the requirement of the latest age group of users. The academic library using web 2.0 technologies is called library 2.0 or also called A-Lib 2.0 [4]. There are many research paper [4][5] where discussed about the web 2.0 & library 2.0. As authors say in[4] [5] that the library 2.0 was earliest created by “Michael Casey” in September 2005 . Library 2.0 provides the facility to interact with users and library organization, the idea behind this technology is to permit the library services for users to work together in a shared atmosphere determined by group of people’s requirements.

II. SOCIAL MEDIA AND SOCIAL NETWORKING SERVICES:

In recent time we can say that it is time of explosion of social media, we can describe social media as it is the group of online communications channels which is dedicated to group of people based participation, interaction, content sharing and collaboration. There are many Websites and applications such as social networking sites, wikis, social bookmarking, forums, micro blogging, are the example of different types of social media [3]. Social networking is a platform for online services that main purpose going on makes possible the construction of social networks between users. For the most part of social network services are web-based as well as offer resources for users to interact over the Internet such as e-mail and instant messaging. Social network sites may consist of an account of each user commonly their profile, his/her social associations, and many more additional services and information’s. Generally social networking sites permit to users for sharing

ideas, give their thoughts and welfare inside their individual networks [6].

To access social networking sites for clients, clients need to sign up and create their web account/user profile. User profile contained some personal information such as name, DOB, schooling, location, occupation, hobbies, likes, dislikes etc. once the user complete required formalities they allowed to search the website’s database to find and connect with friends and other users that the user know or would like to be familiar with. When these users become friend by the use of the social website, the users now share their information and can be viewed by the public. Social networking sites also give the facility to individuals to friendship or connect through a common topic of interest or around a shared thought [7].

As authors says in [8] about accessibility of social networking sites –

- Face book has one billion active users as of October 2012 and 584 million Face book users log on to the site daily.
- 72% of Hispanic, 68% of Black, and 65% of white internet users use social networking sites.
- 15% of social network site users have gotten any health information on social networking sites
- 67% of online adults use social networking sites;
- 40% of cell phone owners use a social networking site on their phone.

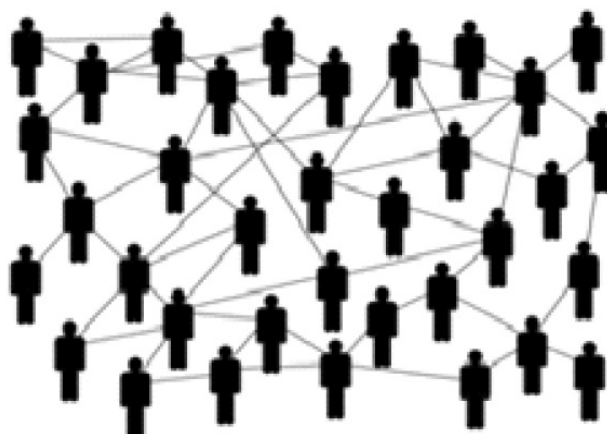


Fig 1: A view of Social network

There are number of social networking sites, here we discuss a few [9]-

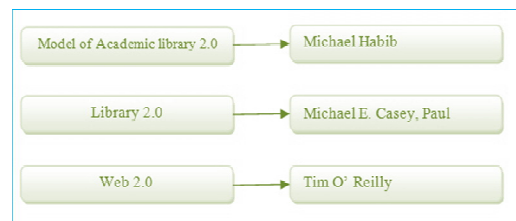
Name of website	Purpose to use
Academia.edu	Social networking site for academics/researchers
About.me	Social networking site
Buzznet	Music and pop-culture
Classmate.com	School, college, work and the military
Facebook	General: Photos, Videos, Blogs, Apps
Flickr	Photo sharing, commenting, photography related networking, worldwide
Goodreads	Library cataloging, book lovers
Google+	For general purpose
Ibibo	Talent based social networking site that allows to promote one's self and also discover new talent.
Linkedin	Use for Business and professional networking
NGO post	Non-Profit news sharing and networking, mainly in India
SocialVibe	Social Network for Charity
Students circle network	A Social Network connecting students, teachers and institutions to course resources, study groups and learning spaces.
Term Wiki	Learning / Languages / Translation - 1.2m terms in more than 1300 subjects
Twitter	General. Micro-blogging, RSS, updates
WAYN	Travel and lifestyle

Wooxie	Blogging and micro-blogging
Viadeo	Global Social Networking and Campus Networking available in English, French, German, Spanish, Italian and Portuguese

We can say that Social networking sites are online communities that agree to users to share information regarding available content and information with other users, their colleagues and friend etc. Several social networking sites give the facility to upload photos, videos and also create blog, post comments, create group, join different group etc. [8]. as discussed in [10] about social network and blogs that these two are at the present the 4th most popular types of online activities. As results shows that 73% of the world online population is now visiting social sites and the time they are spending on that sites is increasing by three times the overall growth rate of the internet. This is the fact that Social networking sites are now accessing more frequently as compared to personal email.

III. ACADEMIC LIBRARIES 2.0

The fundamental idea of A-Lib 2.0 is to make over library services by means of building them more specialize, more interactive and cooperate with each other, more web-based, motivated by user's requirements. The term library 2.0 (Academic library 2.0 or A-Lib 2.0) has been developed from web 2.0 theory. Using Web 2.0 technologies, library services are more interactive, collaborative and web-based has been framed as Library 2.0 [4]. The basic idea for developing academic library 2.0 is to change the library services and consent to the library services to work with interactive and collaborative environment as per the user's requirements. The main purpose of library 2.0 is to promote synchronous social interactions between library organization and students/users [5].



Many studies have shown that how Web 2.0 tools can be used for enhancing library services [4] [11][12]. There is no doubt that using web 2.0 services by academic libraries having supplementary outcomes. Such impacts vary and depend on the category of services, their characteristics and functionalities, and the method they are used. Using web 2.0 services in libraries there are lots of benefits or improvements these are-

- Up gradation in communication system among librarians.
- Greater than before importance of the library to the users.
- Chances are better to find quick solutions to convene the requirements of users and also improvement in shared information and collaboration.
- Involvement of users is Increases and improved communication of the library with such users.

There are lots of web 2.0 websites which is used by library organization for effective and efficient services. Web 2.0 technology and social media applications such as social networking sites, blogs, wikis etc. they all assure an extra vibrant, social participatory internet [11].

Web 2.0 is a network where across all devices is connected. It is required to understanding the web 2.0 components for libraries. To developing a framework that how libraries can use web 2.0 technologies occupied prospective and how they go ahead us in the future. Web 2.0 include social networks, instant messaging, Podcasts, social bookmarking, RSS, wikis. Here we want to discuss some web 2.0 technologies which are implemented in academic libraries. Here we discuss some services of web 2.0 technology which can be used in academic libraries at the institutions [12].

1.1. Blogs:

A blog can be describe as that it is a website where lib 2.0 users can go through their ideas, opinion, suggestion, and comments. The entries done by users in blogs are called blog posts. Blog content may be containing some text, images, links etc. for some other blogs or WebPages [13]. There are some possible implementations in academic libraries such as-

- Blogs provide a platform where the users are able to file their concerns, queries and suggestions as per their requirement of the library.

- Using Blogs users request the resources.
- Blogs used as tools for marketing of the information as well as the library.
- It is also used for some instant necessary actions such as posting Minutes of the Meetings.
- Now days Blogs can serve as discussion forum.

1.2. RSS:

Really Simple Syndication (RSS) uses XML that to blogs or websites. It is a family of web feed and used for group content from blogs or WebPages [12]. RSS can be explain as it is a family of web system used to publish information regarding frequently updated works such as comments, blog entries, news feeds, live audio, and video in the standard formats[13]. The main role of RSS is to keeping users updated with the up-to-the-minute information. Some possible implementation in academic libraries-

- Improve Library education for users by different Web 2.0, Library 2.0, IM, RSS, Blogs, Tagging, Wikis, Podcasting, curriculum/courses by putting together.
- Facility for Librarians that they can subscribe to RSS from the sources for assembles as per their new awareness.
- Provide the information to the users of the availability of new books/maigjins and other available resources.
- Use RSS feeds for library services and make aware users from availability of new research and learning opportunities in different academic departments.
- Encourage to users by organizing events in the library for Library Users.

1.3. Instant messaging:

It is online service provide by internet using instant messing two or more people communicate using short text messages. In A-lib 2.0 it is use to provide virtual reference services, improvement to access of new services and provide the most recent information to users [12]. It is also a very valuable tool which may possibly help library professionals to provide library services. The reason behind the

popularity of IM due to its easy implementation, in reference to long-established methods, which is similar to e-mail or mobile/telephone. Using IM librarians and users would not only communicate with each other but also IM propose synchronous communication which is not done by e-mail.

1.4. Wikis:

Wiki is a webpage or set of Web Pages that can be facilitates the creation and editing of web pages by anyone who is allowed access. In libraries and academic institutions wikis can be used for sharing knowledge, experiences, group learning, subject guide and open source product. The first Wiki software was developed by “Ward Cunningham”. It is also known for creating collaborative websites [12][13]. In academic libraries wikis can be used as-

- A wiki can be used for creating and editing subject channel.
- In library wikis serve as it enables users to create original and authentic contributions to subject contents.
- Wikis also use for the users to share their information and enhance the content, and also keep record of these transactions as collection for future reference.
- Wikis can also be used for social interaction and discussions among the librarians and users.

In recent time wiki have to support a number of activities within libraries. Wikis also used for communication between libraries such as ICT developments, helpdesk, details of projects, communication among staff members etc. In libraries wikis are encouraged for their contributions in the preparation of instructional resources, dictionaries, encyclopedias, books review etc [13].

Above we discussed some web 2.0 technology functions which is useful for academic library rather than these there are also another many Web2.0 encompasses several technologies which is Possible implementation in Academic Libraries and used in academic libraries such as social networking, podcasting, tagging etc.

As the studies shows that web 2.0 in academic library 2.0 have the following essentials i.e. it is-

1. Interactive
2. Collaborative
3. Open to all
4. Participatory
5. convergent

So we can say that the use of Web 2.0 services in the libraries is increasing day by day because of appropriate factors. The accessibility of social networks shows the rate of acceptance of Web 2.0 applications is extremely high because these are simple to use and spontaneous, and facilitate the Instant online communication and sharing of user content [12].

IV. CONCLUSION

In this paper our main objective to highlight the prospective of web 2.0 and library 2.0 in context of academic libraries. The theory of Web 2.0 such as social networks and social networking sites and academic library 2.0 is defined also the possible tools & technology discussed which is useful for library 2.0. We can say that Implementing library 2.0 services require a larger change in the proficient way of thinking to adopt this new technique of services with the objective access to information from anywhere at any time become true because of library 2.0 with web 2.0 technology. Library 2.0 has change the long-established way of thinking about occupation where library only take on in creating the content and services for user, now it changing to the side of user where librarian will enable user to create and give their collaboration. The above discussion is not mean that Library 2.0 is replace traditional viewpoint and services which library has, but it's on the subject of enhancing and extending its services into innovative areas.

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