

## WEB 2.0 TECHNOLOGY IN LIBRARIES

Dr. Siddiqui Eraj Azeza \*

**\* Librarian,**

Dr. Rafiq Zakaria College  
for Women,  
Aurangabad, Maharashtra,  
India

QR Code



**Abstract:** - *This Article defines that the Web 2.0 is a new version of the World Wide Web that emphasize user generated content, usability, and interoperability. Web 2.0 the second phase in the Web's evolution, is attracting the attention of IT professionals, businesses, and Web user. This term was Web 2.0 is a term introduced in 2004 by Tim by Tim O'Reilly and Dale Dougherty at the O' Reilly .The popularity of the term Web 2.0, along with the increasing use of blogs, wikis, and social networking technologies, has led many in academia and business to append a flurry of 2.0's to existing concepts and fields of study.*

**Keywords:** Web 2.0, Library 2.0, World Wide Web, Blog, RSS, and Social Networks.

### Introduction

“Web 2.0” does not have a precise definition. To many people, the phrase refers to special web application technologies and websites, such as weblogs and wikis, which use the Internet in collaborative way to provide services to users. Web 2.0 relies in large part on the user- as publisher model of interaction and allows for user-created content to be developed an implemented by large groups of individuals. These technologies are increasingly being used by companies for better staff collaboration and communication. O'Reilly outlined seven principles that can help distinguish the core features of Web 2.0 applications. A number of Web 2.0services and sites have appeared in the recent years. Some popular services are YouTube,

Face book, MySpace, etc. The term ‘Web 2.0’ was coined to define an emerging pattern of new uses of the Web and approaches to the Web development, rather than a formal upgrade of Web technologies as the 2.0 version number may appear to signify. The key Web 2.0 concepts include:

### Web 2.0

Web 2.0 is a term that describes the changing trends in the use of World Wide web technology and Web design that aim to enhance creativity, secure information sharing, increase collaboration, and improve the functionality of the Web as we know it (Web 1.0). These have led to the development and evolution of Web-based communities and hosted services, such as social-

networking sites (Face book, MySpace), video sharing sites (i.e. YouTube), wikis, blogs, etc.

Although the term suggests a new version of the World Wide Web, it does not refer to any actual change in technical specifications, but rather to changes in the ways software developers and end-users utilize the Web. Web 2.0 is a catch-all term used to describe a variety of developments on the Web and a perceived shift in the way it is used. This shift can be characterized as the evolution of Web use from passive consumption of content to more active participation, creation and sharing. Web 2.0 Websites allow users to do more than just retrieve information. Now users can build on the interactive facilities of Web 1.0 to provide "network as platform" computing, allowing users to run software-applications entirely through a browser. Users are able to co-author the data on a Web 2.0 site and exercise control over it. These sites have an "architecture of participation" that encourages users to add value to the application as they use it. This stands in contrast to traditional Websites, which limit visitors to passive viewing and whose content only the site owners can modify.

### **Library 2.0**

blog, library crunch in 2006. The idea is a transformation of the library services-the way they are delivered to the user community, basically allowing the library services to operate in an interactive, collaborative atmosphere driven

by community needs. The earlier version of the web-based library instruction and services were text-based and non-interactive where library users have very limited freedom in terms of their interaction with library staff and user community. Web world is, therefore, a great source and channel of information to share ideas and experiences. It is recommended that librarians should welcome and adapt this new The idea of Library 2.0 was first generated by Michael Casey and published on his concept Web 2.0 in the changing technological world.

- We are losing the interest of our users.
- We no longer consistently offer the services our users want.
- We are resistant to changing services that we consider traditional or fundamental to library service.
- We are no longer the first place many of our current and potential customers look for information.

### **Use of Web 2.0 Tools in libraries**

Library staff use Web 2.0 tools for professional and personal development however, Web 2.0 at the institutional level. identified Wiki, blog, Really Simple Syndication (RSS), Instant Messaging (IM) and podcast as the prominent Web 2.0 tools for Libraries. In addition to these, it discusses the use of vodcast because the researchers are working in an open and distance learning system. The potential of vodcast can be harnessed for providing services to distance

learners. The following segments define and explain the

Various Web 2.0 tools which can be used in libraries at the institutional level.

- Rich User Interactions
- Blogs
- Wikis
- Really Simple Syndication (RSS) feeds
- Multimedia Sharing
- Social Networking
- Bookmarking
- Tagging

### **Blogs and Wikis**

Blogs and Wikis are Web 2.0 application, which facilitates the users to share their ideas, knowledge. A wiki is a way of constructing knowledge; a blog is a way of distributing news [9]. Ultimately, blogs and wikis have been used as support for collaborative work. Wikis are useful in digital libraries in several ways:

- To support collaborative work, substituting old .doc or .pdf documents.
- To produce a course or study corpus in cooperation with all academic stakeholders: lecturers, students ...
- To distribute information to students, in order to facilitate the updating of materials by the professor.
- Blogs are useful in digital libraries in several ways:

- Blogs provide an easy way to produce dynamic learning environments even though without basic knowledge of web page construction.

- Blogs are useful as an alternative digital portfolio or as a learning log.

- Blogs are very useful for collaborative work on the Web.

### **RSS feeds**

RSS is a family of formats that allow users to find out about updates without actually having to go and visit the relevant sites. RSS makes it possible to spread information, replacing traditional emailing lists and reducing e-mail overload; it also allows users to read all its news in one place [10]. Building the digital libraries by integrating RSS feeds, user can get up to date information on particular interested topics at his Homepage without navigating or searching in the DL system.

### **Multimedia Sharing**

Web 2.0 technologies provide better access and sharing mechanisms for multimedia information. Podcasting is one among them which provides a different way to share the audio visual material. Video on-line is another which facilitates the better video delivery to the user in online. By using these technologies and services digital library can disseminate multimedia information to its users in a better way.

### **Social Networking**

Web 2.0 is Collaborative and Interactive. Social networking services enable users to share information within a network of colleagues through user profiles, linking users to others posting similar information. A social network thus can be formalized into a net structure comprising nodes and edges. Nodes represent individuals or organizations. Edges connecting nodes are called ties, which represent the relationships between the individuals and organizations. By enabling this in digital libraries will build a network among the interested and users can add the information to the digital library like books reviews and comments etc.

### **Bookmarking**

These systems allow users to create lists of bookmarks or favorites, to store them centrally on a remote service, and to share them with other users of the system. By enabling this feature in digital libraries, users can create and share a set of resources with other users.

### **Tagging**

A tag is a keyword that is added to a digital object (e.g. a website, picture or video clip) to describe it, but not as part of a formal classification system. The concept of tagging has been widened far beyond website bookmarking, and services like Flickr (Photos), YouTube (video) and Audio (podcasts) allow a variety of digital artifacts to be socially tagged. By

### **News Feeds**

The advancement of web has brought news feeds directly into our desktops. The advent of news feeds which are called as RSS (Relatively Simple Syndication) has seen that the news service come to the user. The emerging library services seem to have captured this novel idea into the development of library services and have imbedded them in the library services. In olden days the libraries ran a service called SDI (Selective Disseminating of Information). Those services can be very effectively automated to serve users with news feed. For a multimedia library catalogues and dynamic library catalogues like music catalogue the RSS Feeds are good choices

### **Podcasting/ Vodcasting**

Podcasting can be defined as the process by which the digital audio files are distributed over the internet using either feeds or by any other distribution media. Vodcasting is the video format of the same kind of service. Mostly the media casting which includes both audio and video is done either through the “media on demand” or through subscription services. These services allow the users to have a higher level of control over what media they want as it works on the demand and supply chain of activity.

### **Benefits of Web 2.0 Technology:**

Web 2.0 technologies are widely used in peer to peer networks, social networks, web blogs,

forums etc. More benefits of Web 2.0 technologies are

1. Acceleration: It accelerates the performance of web applications and could transfer data very fast from server to client system and the data will be very much reliable.

2. Good User Interaction: Web 2.0 supports great user interaction in such a way that user could navigate through options very easily.

3. Simple and great way of publicizing things: This could be achieved using Web 2.0 technology with the help of social networks, blogs, forums, Second life.

4. Cheap way of advertising things: Generally if we want to advertise things on electronic media, it may cost several dollars, but when we use Web 2.0 technologies like web blogs, social networks we can reach thousands of people with just a dollar cost.

5. Several solutions for single problem: We can find several solutions for single problem posted, which got posted in networking sites, web blogs etc. I tried learning ASP.NET few months back in that situation I got struck about initiation into programming. Then I used face book, orkut communities for solution where I got at least 30 responses in 24 hours time from people who are anonymous to me.

6. Easy way to collaborate business: Using Web 2.0 technology we can collaborate businesses which leads to finding new solutions. People can find solutions for the real life problems using virtual ways.

7. Leveraging Business: We can leverage our business using these of web 2.0 tools like face book, orkut, Second life. Main thing that leverages business will be instant messaging like RSS feeds. One of my friends got benefited in stock market because of RSS news where he gets every second updated news about listed companies in NASDAQ.

### **Advantage of Web 2.0**

- Social Media marketing and search engine optimization.
- Equal Chance to all to post their views and comments.
- Increase the circle of of friends and contacts through social networking
- Latest update and content can be received if you are a RSS reader.
- Online Promotion of businesses, products and services .
- Engaging the customers. Customers can write their views about the products and Services.
- Create a large and strong network.
- Increase in number of friends.
- More interaction leads to higher exchange of knowledge.
- Build strong relationship.

### **Disadvantage of web 2.0**

- Information overload. To much information is daily posted by many people with different thought. This creates confusion for the readers and the quality of the content is not reliable.

- Freedom to post views and comments provides good opportunities for competitors and rivals to post negative comments about other companies.
- Too many fake ID'S and spammers.
- Forgeries and hackers commit crimes.
- People are highly dependent on internet to network
- Wastage of time
- High number of frauds and hackers.

### Conclusion:

Use of Web 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. The best conception of Library 2.0 at this point in time would be a social network interface that the user designs. It is a personalized OPAC that includes access to IM, RSS feeds, blogs, wikis, tags, and public and private profiles within the library's network. It is virtual reality of the library, a place where one can not only search for books and journals, but interact with a community, a librarian, and share knowledge and understanding with them. While Library 2.0 is a change, it is of a nature close to the tradition and mission of libraries. Library 2.0 will revolutionize the profession. Rather than creating systems and services for patrons, librarians will enable users to

create them for themselves. A profession steeped in decades of a culture of control and predictability will need to continue moving toward embracing facilitation.

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