

WEB 2.0 TECHNOLOGIES AND ITS APPLICATIONS IN LIBRARIES

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Abstract: This study tries to provide basic ideas and concepts of the web 2.0 in the context of library. This study analyzed various principle developments of web 2.0. At present time, some social software applications are there as most up-to-date properties of the internet users. In libraries the key ones include Social networking sites, RSS, Open ID, Blogs, wikis, IM, social Bookmarking etc. Web 2.0 or Library 2.0 has changed the usual way of library services. The changes in web technologies have enabled libraries to produce novel interactive services such as virtual reference services, personalized interfaces and audio-visual media and how library services have evolved through applications of Web 2.0 technologies is the main focus of this paper.

Keywords: Web 2.0, Folksonomy, Blog, Social Network, Wiki, RSS.

1.0 Introduction: Web 2.0 is a recent Phenomenon which has a great impact on library services. It is a web based technologies, like Wiki, Blog, Folksonomy, Really Simple Syndication (RSS), Mashups, Social Networking, Instant Messaging (IM), Podcast and Vodcast, Social Bookmarking, Cascading Style Sheets (CSS), Streaming media, Content Hosting Service, Information Tagging, Open ID, etc. and now-a-days these technologies are being used in the libraries by the library professionals world over for betterment of library services. Now, we will discuss why and how these Web 2.0 technologies are applied in libraries in the next section.

2.0 Meaning of Web 2.0:

There is no such definition of Web 2.0 rather it can be termed as recent Phenomenon which is mainly a cluster of web based application technologies and websites. It is not any web version. This term was prominently introduced by Tim O'Reilly and O'Reilly Media and Media Live International in 2004 by organizing a conference with the name "Web 2.0", but the term was first coined by Darcy DiNucci, an information architecture consultant in 1999. Web 2.0 is nothing but the applications of improved and new technologies on web platform. Today users are using internet to get specific kind of information by using Web 2.0 technologies.

3.0 Web 2.0 over Web 1.0:

Driving by the expectations of internet users which were not being fulfilled by Web 1.0 have given the birth of Web 2.0 concept which have some different characteristics over Web 1.0 and some of them are stated as follows:

- Shifting of control over web content from webmaster to the users;
- In Web 2.0 information flow is dynamic whereas in Web 1.0 information flow is static;
- Web 1.0 is browser based while Web 2.0 is user oriented through keywords search;
- Web 2.0 use XML web pages but Web 1.0 use HTML web pages;
- Web 1.0 relies on Taxonomy whereas Web 2.0 relies on Folksonomy;
- Web 1.0 provides only information but Web 2.0 provides inter active platform between user and information;
- By Web 2.0 a new online community has been generated, that Web 1.0 failed;
- Web 2.0 has enhanced and made possible online marketing over Web 1.0 ;
- Web 1.0 is client-to-server but Web 2.0 is peer-to-peer.

4.0 Some of Web 2.0 Technologies And Its Applications in Libraries:

Some of them are as follows:

4.1 Wiki:

It is a type of collaborative web pages and databases to be created and edited using a common web browser. A wiki can be open to a global audience or can be restricted to a select network or community. Wikis can cover a specific topic or subject area. Wikis also make it easy to search or browse for information

4.2 Blog:

In 1997 Jorn Barger coined the term Blog or web-log. A blog is a website where entries are written in chronological order and commonly displayed in reverse chronological order. Blog refers to a simple webpage consisting of brief paragraphs of opinion, information, personal diary entries. It's called *posts*. Some blog combines text, image and links to another blogs, web pages and media related matter.

4.3 CSS:

CSS stand for Cascading Style Sheet. It is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media.

4.4 Social Bookmarking:

Social bookmarking is a method for internet users to store, organize, search and manage bookmarks of web pages on the internet with the help of metadata.

4.5 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. 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. The main role of RSS is to keeping users updated with the up-to-the-minute information.

4.6 Mashups:

Mashup is a web application that combines data from more than one source into a single integrated tool. We can provide bibliography service having data from one source and image of cover page from other source.

4.7 Social Networking:

A social networking service is an online platform that people use to build **social networks** or **social** relations. It is allows an individual to create a profile for themselves on the service and share that profile with other users with similar interests to create a social network. Users can choose to have public profiles which can be viewed by anyone or private profiles which can only be viewed by people that the users allow. Users can usually post photographs, music and videos on their site.

4.8 Content Hosting Services:

A file hosting service, cloud storage service, online file storage provider, or cyberlocker is an Internet hosting service specifically designed to host user files. It allows users to upload files that could then be accessed over the internet only used by the user of the phone after a password or other authentication is provided. Content hosting or content sharing sites allow users to upload content that they have created for others to view. Users can also create an individual profile and list their favourite photos or videos. Users are able to rate and comment on the videos or photos posted and provide feedback to the creator and other users. Copyright infringement is an issue for some of these services as many users do not upload original content.

4.9 Folksonomy:

Folksonomy is the process of using digital content tags for categorization or annotation. It allows users to classify websites, pictures, documents and other forms of data so that content may be easily categorized and located by users. The term is derived from the two words "folks" and "taxonomy". It is taxonomy provided and created by folks. Information consumers provide tagging and give rise to web classification. Folksonomy is also known as social tagging, collaborative tagging and social classification. It may hold the key to developing a Semantic Web, in which every web page contains machine-readable metadata that describes its content.

4.10 Podcasting/Vodcasting: The word originated as a portmanteau of "iPod" and "broadcast". The files distributed are in audio format, but may sometimes include other file formats such as PDF or EPUB. Videos which are shared following a podcast model are called video podcasts or vodcasts. Podcasts may also include images, including PowerPoint presentations. If there is a script or lecture notes for the podcast, that will be protected as a literary work. There may be multiple layers of copyright in a podcast, depending on the content of the podcast. If there is a presenter or a subject being interviewed, they will not only own copyright in their presentation or interview but they will have performers' rights. There will also be a separate copyright in the actual recording itself.

4.11 Tagging: Another Web 2.0 feature which is becoming common in library community is called 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. Flickr and Del.icio.us are some of the web based examples of tagging. As the Web 2.0 re-emphasises the importance of users and their impact on services the impact of tagging in library services are greatly anticipated. The tagging service from the university of Pennsylvania library catalogue illustrates how tagging is being tried in a library catalogue.

4.12 Streaming Media: Streaming media is multimedia that is constantly received by and presented to an end-user while being delivered by a provider. It is another important Web 2.0 enhancement which has an influence on the library services. Streaming media is a "Sequential delivery of multimedia content over the network" mostly on request, providing the requested media instantaneously. In traditional libraries many short films, music, and different forms of streaming media are catalogued and given to the users to be used offline. These are potential materials which are marked for streaming media for the users.

5.0 Conclusion:

The interactive and collaborative nature of Web 2.0 not only brings happiness among internet users but also brings some security risks along with it. The ability of users to make changes of web pages has brought some security risks, such as, Data leaks, increase in spywares, information overexposure, introduction of malware and virus, exposure of End-points, increase of spam volume, etc. For this and like Web 1.0, dissatisfactions also grows among the internet users about Web 2.0 which in turn have led the web community to a new concept of Web 3.0. As per expectations, in Web 3.0 information overexposure will be reduced through semantic searching. It will be knowledge base with personal intelligent digital assistants. In this midst of new horizon of Web 3.0 and with all other embedded security threats, Web 2.0 with all its technologies is still now an important and effective platform for better and efficient library services world over.

6.0 References:

1. Cohen, L B. (2007). Library 2.0 Initiatives in Academic Libraries. Chicago Association of College & Research Libraries
2. Tarade Rashmi S. and Singh Nilu(2014). Significance of Web 2.0 Technology and its Application in Academic Libraries. International Journal of Computer Trends and Technology (IJCTT) – Vol.10, 241-246.
3. http://en.wikipedia.org/wiki/Web_2.0, visited: 10-12-2017.
4. What is Web 2.0? Ideas, technologies and implications for education by Paul Anderson, <http://www.jisc.ac.uk/media/documents/techwatch/tsw0701b.pdf>, retrieved on 15-12-2017.
5. Aird, Richard, Hugh Beattie, Christine Rooney- Browne, and Jo Rowley. "A Guide to Using Web 2.0 in Libraries." Scottish Library and Information Council and the Chartered Institute of Library and Information Professionals in Scotland.
6. Jana Shibsankar and Karkee Prabin(2009). Web 2.0:Of the users, by the users, for the users. KNICT, 1-5.
7. Mohmed Hanif N(2009). Need for Web 2.0 Technology for the Libraries. 7th International CALIBER-2009, Pondicherry University, Puducherry, February 25-27.
8. Thanuskodi, S. (2011). "WEB 2.0 Awareness among Library and Information Science Professionals of the Engineering Colleges in Chennai City: A Survey." J Communication, 1(2): 69-75.
9. Dora, Mallikarjun, and Bulu Maharana. "A-Lib 2.0:New Avatar Academic Libraries with Web 2.0 Applications." 6th International CALIBER-2008. 6th 469-476.