

Use of Application of the Web2.0 Tools in College Libraries of Western Suburban Area

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Citation of Article: Yadav, S. M., Gupta, S. K., & Gupta, P. V. (2026). Use of Application of the Web2.0 Tools in College Libraries of Western Suburban Area. International Journal of Classified Research Techniques & Advances (IJCRTA) ISSN: 2583-1801, 6 (1), pg. 98-110. ijcrta.org

DOI: [10.5281/zenodo.19536752](https://doi.org/10.5281/zenodo.19536752)

Abstract:

The purpose of this paper is to find out awareness of Application of Web 2.0 tools in College Libraries of Western Suburban Area and the aim of this study to identify the use of applications of the web 2.0 tools in College libraries and Challenges faced by the library, the need for this study is to study about web 2.0 and Web 2.0 tools used for making library services better. Nowadays technology is developing very fast and methods for getting information have changed similarly. it is seen that in many libraries better services are provided to their patrons using web 2.0 tools such as blogs, RSS, Instant Messaging, Podcasting, Tagging & Social Networking.

The user can get the different types of services from libraries at their place as web 2.0 provides the facility. It can be said that web 2.0 provides the facility. It can be said that Web 2.0 is a made of distance learning. It is essential to know about the current technologies used by libraries.

Keywords:

Web 2.0, Library 2.0, Web 3.0, Blog, RSS, Wiki, Social Bookmarking Streaming Media, Social Networking Software Podcasts.

Introduction:

The World Wide Web (WWW) was initially designed as a visual media to publish ideas and information online to a potentially large audience. In web 1.0 environment, users could only read and learn from the websites created by the Individuals or Institutions. It is, therefore, named as “read-only media. With new developments and advent in technologies, the “read-only” web has graduated to read and write web, which is also known as web 2.0. it allows public to interact,

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contribute, coordinate and collaborate in the process of delivery of web-based services and collaborative fashion. The libraries, with their responsibilities of facilitating access to information resources and delivering services to their user communities, found these interactive resources and delivering services to their user communities, found this interactive platform most suitable and therefore were its early adopters. Library 2.0 is predominantly viewed as the selective application of web 2.0 tools and techniques with emphasis on user's services.

Definition:

Web 2.0 is the move toward a more social, Collaborative, Interactive and Responsive web, it is a change in the philosophy of web companies and web developers, but more than that, web 2.0 is a change in the philosophy of society as a whole.

According to NARA (National Archives and Records Administration) (2010) "Web 2.0 and social media are umbrella terms. These technologies are used to define the various integrated web technologies, social interaction and content creation. Therefore, Web 2.0 and social media are synonyms".

Tim O'Reilly and Dale Dougherty (2005), responsible for popularizing the term Web 2.0 define it as "applications that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better as more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an "architecture of participation", and going beyond the page metaphor of Web 1.0 to deliver rich user experiences"

History of Web 2.0:

The World Wide Web is a system of interlinked hypertext document accessed via the internet. With a web browser, one can view web pages that contain text, image, videos, and other multimedia and navigate between them via hyperlinks. On March 12, 1989, Tim Berners-Lee, a British computer scientist and former CERN (European Organization for Nuclear Research) employee wrote a proposal for what would eventually become the World Wide Web. The web was originally conceived and developed to meet the demand for automated information-sharing between scientists in universities and institutes around the world. The 1989 proposal was meant for a more effective CERN communication system, but Berners-Lee eventually realized that the concept could be implemented throughout the world. Berners-Lee and Belgian computer scientist Robert Cailliau proposed in 1990 to use hypertext to link and access information of various kind as a web of nodes in which the user can browse at will. In these ways the first web service was designed, tested, and latterly confined as Word Wide Web.

Web 1.0:

Web 1.0 refers to the first stage of the World Wide Web evolution. Earlier, there were only a few content creators in Web 1.0 with a huge majority of users who are consumers of

content. Personal web pages were common, consisting mainly of static pages hosted on ISP-run web servers, or free web hosting services.

Features of the Web 1.0:

- Easy to connect static pages with the system via hyperlinks
- Supports elements like frames and tables with HTML 3.2
- Also has graphics and a GIF button
- Less interaction between the user and the server
- You can send HTML forms via mail
- Provides only a one-way publishing medium

Web 2.0:

2004 When the word Web 2.0 became famous due to the First Web 2.0 conference (later known as the Web 2.0 summit) held by Tim O'Reilly and Dale Dougherty, the term was coined by Darcy DiNucci in 1999. Web 2.0 refers to worldwide websites which highlight user-generated content, usability, and interoperability for end users. Web 2.0 is also called the participative social web. It does not refer to a modification to any technical specification, but to modify the way Web pages are designed and used. The transition is beneficial, but it does not seem that when the changes occur. Interaction and collaboration with each other are allowed by Web 2.0 in a social media dialogue as the creator of user-generated content in a virtual community. Web 2.0 is an enhanced version of Web 1.0.

Features of the Web 2.0:

- Free sorting of information permits users to retrieve and classify the information collectively.
- Dynamic content that is responsive to user input.
- Information flows between the site owner and site users using evaluation & online commenting.
- Developed APIs to allow self-usage, such as by a software application.
- Web access leads to concerns different, from the traditional Internet user base to a wider variety of users.

Web 3.0:

It refers to the evolution of web utilization and interaction which includes altering the Web into a database, with the integration of DLT (Distributed Ledger Technology **blockchain** is an example) and that data can help to make Smart Contracts based on the needs of the individual. It enables the up-gradation of the backend of the web, after a long time of focusing on the **frontend** (Web 2.0 has mainly been about AJAX, tagging, and other front-end user-experience innovation). Web 3.0 is a term that is used to describe many evolutions of web usage and interaction among several paths. In this, data isn't owned but instead shared but still is, where services show different views for the same web / the same data.

The Semantic Web (3.0) promises to establish “the world’s information” in a more reasonable way than Google can ever attain with its existing engine schema. This is particularly true from the perspective of machine conception as opposed to human understanding. The Semantic Web necessitates the use of a declarative ontological language like OWL to produce domain-specific ontologies that machines can use to reason about information and make new conclusions, not simply match keywords.

Features of the Web 3.0:

- **Semantic Web:** The succeeding evolution of the Web involves the Semantic Web. The semantic web improves web technologies in demand to create, share and connect content through search and analysis based on the capability to comprehend the meaning of words, rather than on keywords or numbers.
- **Artificial Intelligence:** Combining this capability with natural language processing, in Web 3.0, computers can distinguish information like humans to provide faster and more relevant results. They become more intelligent to fulfill the requirements of users.
- **3D Graphics:** The three-dimensional design is being used widely in websites and services in Web 3.0. *Museum guides, computer games, e-commerce, geospatial contexts*, etc. are all examples that use 3D graphics.
- **Connectivity:** With Web 3.0, information is more connected thanks to semantic metadata. As a result, the user experience evolves to another level of connectivity that leverages all the available information.
- **Ubiquity:** Content is accessible by multiple applications, every device is connected to the web, and the services can be used everywhere.
- **DLT and Smart Contracts:** With the help of DLT, we can have a virtually impossible-to-hack database from which one can have value to their content and things they can own virtually, this is the technology that enables a trustless society through the integration of smart contracts which does not need to have a middle man to be a guarantor to make that contract occur on certain cause its based on data from that DLT. It's a powerful tool that can make the world a far better place and generate more opportunities for everyone on the internet.

Difference Between web 1.0, Web 2.0 and Web 3.0.:

Sr. No.	Web 1.0	Web 2.0	Web 3.0
1.	Mostly Read-Only	Wildly Read-Write	Portable and Personal
2.	Company Focus	Community Focus	Individual Focus
3	Directories	Tagging	User behaviour

Sr. No.	Web 1.0	Web 2.0	Web 3.0
4	Britannica Online	Wikipedia	The Semantic Web
5	Information sharing is the goal.	Interaction is the goal.	Immersion is the goal.
6.	It connects information as its primary goal.	It aims to connect people.	Focuses on relating knowledge.

Table 1.1. Difference Between web 1.0, Web 2.0 and Web 3.0.

Library 2.0:

Maness defines “Library 2.0 as the application of interactive, collaborative and multi-media web-based technologies to web-based library services and collections.” Library 2.0 is merely a description of the latest instance of a long-standing and time-tested institution in a democratic society. Library 2.0 is associated with technologies such as blogs, wikis, podcasts, RSS feeds, etc. which facilitate a socially- connected Web.

Features of the Library 2.0:

- It is user-cantered
- it provides a multi-media experience.
- User friendly iv. Use of social networking: Library blog, RSS feed, etc.
- More interactive and collaborative.
- Better online interaction about information sources & services.
- Sharing of resources.

Library 2.0 Tools:

1. **Blog:** A blog or weblog is an online journal or web site on which articles are posted and displayed in chronological order. Their content most often centres on a particular subject matter or theme. In essence, blogs have become the new “home page”.

How are librarians using blogs?

Librarians are using blogs to exchange and gathered up to the minute news and developments in the field. They are blogging conference session for their readers, sharing job experiences, providing summaries and statistics from industry reports, writing scholarly articles and recommending resources. Blogging software like WordPress, Type Pad LiveJournal, Movable Type etc.

2. RSS:

The RSS formats were preceded by several attempts at web syndication that did not achieve widespread popularity. The basic idea of restructuring information about websites goes back to as early as 1995, when Ramanathan V. Guha and others in Apple Computer's Advanced Technology Group developed the Meta Content Framework.



Figure 1.1. RSS Symbol

Source <https://pixabay.com/en/rss-rss-feed-symbol-logo-icon-8645/>

How libraries using RSS?

Libraries are utilizing RSS technology to share library news and content, as well as to gather and redistribute related information from other Web sources. Libraries are providing patrons with library news subscriptions, and promoting new acquisitions. Here is a look at how libraries are using RSS in new and interesting ways.

How are librarians using RSS?

Librarians are keeping up to date by subscribing to news and information sources such as blogs and library journals via RSS feeds. They are saving database searches for future and subscribing to them through news readers. Finally, they are publishing content on their own blogs and Websites and syndicating it for others to read and use.

2. WIKI:

Wiki technology provides an field for effortless collaboration and knowledge sharing community of users without any programming knowledge. It allows team members to brainstorm, gather subject expertise, work together on projects, create training resources, and replace intranets.

How are librarians using wikis?

Librarians – organizers and disseminators of information by nature - have included wiki technology in their work to capture and provide knowledge to their patrons and to each other's. Librarians are creating readers advisories, LIS encyclopedia, guides to local information, collections of library instructions resources, and directories of blogging librarians. Wiki software are PBwiki, Jot Spot, Social Text Mediawiki, Wikispaces, etc.

4. Social Book Marking:

Social bookmarking is a way for people to store, organize, search, and manage “bookmarks” of web pages. Users save links to web pages that they like or want to share, using a social bookmarking site to store these links. These bookmarks are usually public, and can be viewed by other members of the site where they are stored. Examples of social bookmarking sites include

del.icio.us and digg.com .Most social bookmark services are organized by users applying “tags” or keywords to content on a Web site.

How are libraries using social bookmarking?

Libraries are using social bookmarking applications to provide patrons with subject guides, recommended web resources lists, and reader’s advisory sources. They are bookmarking websites, images and podcasts’ in subject areas ranging from business to baseball and offering their patrons an up to the minute guide to the best of the web.

How are librarians using social bookmarking?

Librarians are using social bookmarking tools to organize their personal research by subject area, to track conference related materials, and keep up to developments in the field. They are posting and saving journal articles, PowerPoint presentations, podcasts, and blog posts for later retrieval and are sharing with and subscribing to fellow colleagues and noteworthy tags.

5. STREAMING MEDIA:

Streaming media is video and/or audio data transmitted over a computer network for immediate playback rather than for file download and later (offline) playback. Examples of streaming video and audio include YouTube, internet radio and television broadcasts, and corporate webcasts.

How are libraries using Streaming media?

Libraries are tapping into the power of video as a way to promote library programs and services, provide library instructions, and engage the community. They are creating library tours, staff videos, reading programs commercials and guides to library collections.

How are librarians using Streaming media?

Librarians are joining video sharing communities such as you tube and blip.tv to explore user created films as well as to share their own video clips and keeping up with today's users. Streaming media applications such as You Tube, Yahoo! Video, MetCafe etc.

6. SOCIAL NETWORKING SOFTWARE:

Social networking web sites are places where people gather to interact and relate with other members. They are environments where users can seek out like-minded people and build connections with them. They provide the tools necessary for people to be creative and to generate original content in forms ranging from blogs and journals to photos, video and customized user profiles

How are libraries using social networking?

Libraries are using social networking web sites as vehicles for outreach and promotion, as portals to library web sites and as a means of conducting with patrons. Libraries are going where the users are by joining in these online communities.

How are librarians using social networking?

Librarians are utilizing social networking sites to participate in the social web. They are joining in the global conversation that is happening within these ecosystems.

7. PODCASTS

The word podcasting was derived by combining iPod with broadcasting, pushing files out and publishing those using RSS (Really Simple Syndication technology). Due to their portability, especially when downloaded to an MP3 player, podcasts have a wide appeal, particularly among undergraduate and graduate students of the net generation.

How are libraries using podcasting?

Libraries are using podcasting technology to communicate with and disseminate information to their patrons. They are creating podcasting to promote library programs and exhibits, instruction patrons how to better utilize library resources, present Storytime reading time, and provide book talks.

How are librarians using podcasting?

Librarians are creating, listening, and subscribing to podcasts' on subjects as diverse as world history, motorcycling, and liberal politics. They also are taking advantages of the many learning opportunities these simple audio recording provide.

8. INSTANT MESSAGING (IM):

IM is a form of real-time communication between two or more people based on typed text, images etc. IM has become increasingly popular due to its quick response time, its ease of use, and possibility of multitasking. It is estimated that there are several millions of IM users, using for various purposes viz: simple requests and responses, scheduling face to face meetings, or just to check the availability of colleagues and friends.

9. 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.

Aims and Objectives of the study:

Aims:

To study Use of Application of the Web2.0 Tools in College Libraries of Western Suburban Area.

Objective.

1. To find out awareness about the application of web 2.0 in college libraries.
2. To know the purpose of using web 2.0 in library.
3. To know the usefulness of Web 2.0 tools in the library service
4. To find out challenges faced by library while using Web 2.0

Literature Review:

Anderson (2007), by using new technologies, libraries has been transformed into places to create knowledge and allow users to develop and to get the information by their own way. This can generate new opportunities for libraries and the users' changing needs.

Blates (2011) web 2.0 tools used for E-learning for academic work or for general users. E-learning is well suitable for emerging the skills needed in a knowledge based culture, in specific how to find, estimate, consolidate, and apply information related to specific work areas.

Boateng & Liu (2013) Web 2.0 technology usage in academic libraries is ever increasing. There is incredible scope for new uses of Web 2.0 tools, however this needs an institutional environment that inspires and rewards investigation and risk taking.

Changdeo & Shamrao (2014) Web 2.0 save the time, money and energy of librarian to bring up-to-date them and it's also helpful in making library services more effective for all library functions. It will increase the feature of library services.

Dr. Shukla & Dr. Tripathi (2012) These tools and techniques are beneficial for libraries in providing new services in a new and interesting way and ongoing changes are likely to make libraries more interesting, more relevant.

Holmberg, Huvila, Kronqvist-Berg and Wide'n-Wulff (2009) library 2.0 contains both new and older software tools that are beneficial for providing upgraded and new library services.

Juliet Eve (2008) web 2.0 tools are the technology used in the library for use of interactive collaboration and multimedia with the user.

N.S Harinarayana (2009) to explore current trends in the use of Web 2.0 tools and Library 2.0 features as illustrated through university library websites around the world. It is applied as a medium of information for the user.

O'Reilly (2005) Web 2.0 is "the business is rising in the computer trade which is the move to the internet as platform & has an attempt to know the rules for success on that new platform".

Research Methodology:

Survey research is used for analysing the application of web 2.0 in college libraries in Thane and Mulund area. Survey research is one of the most important areas of measurement in applied social research. The broad area of survey research covers any size measures that involve asking questions to respondents. Surveys are a very traditional way of conducting research.

SAMPLING PROCEDURE:

Judgement sampling, i.e. non-probability method which is based on the judgment of the librarians.

DATA ANALYSIS;

The analysis and Interpretation of data which were collected through the Questionnaire. The collected data has been organized and tabulated by using tables, pie chart, histogram.

1.AWARENESS ABOUT WEB 2.0 TOOLS

Are you aware of the web 2.0 tools?

Awareness of Web 2.0	Frequency
Yes	10
No	

Table 1.2 Awareness of Web 2.0

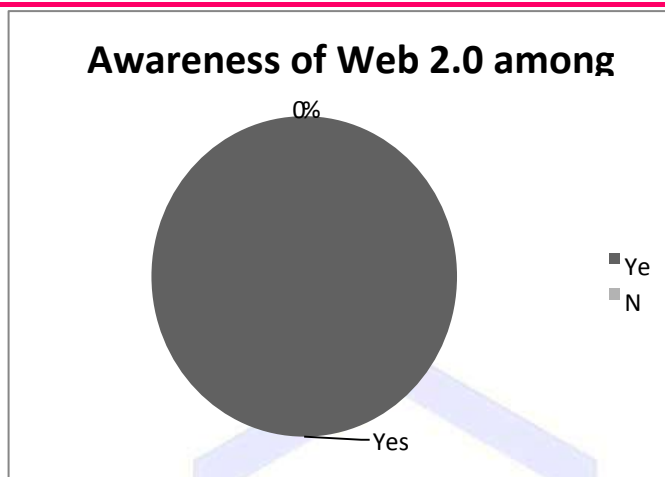


Figure. 1.2 . Awareness of Web 2.O Tools

2. For what purpose the library use the web 2.0 tools?

Library Use the web 2.0 tools	Frequency
Marketing of Library Services	7
Social Bookmarking & Tagging	4
Blog	4
Image & Video Sharing	4

Table 1.3. Purpose the Library use the Web 2.0 tools

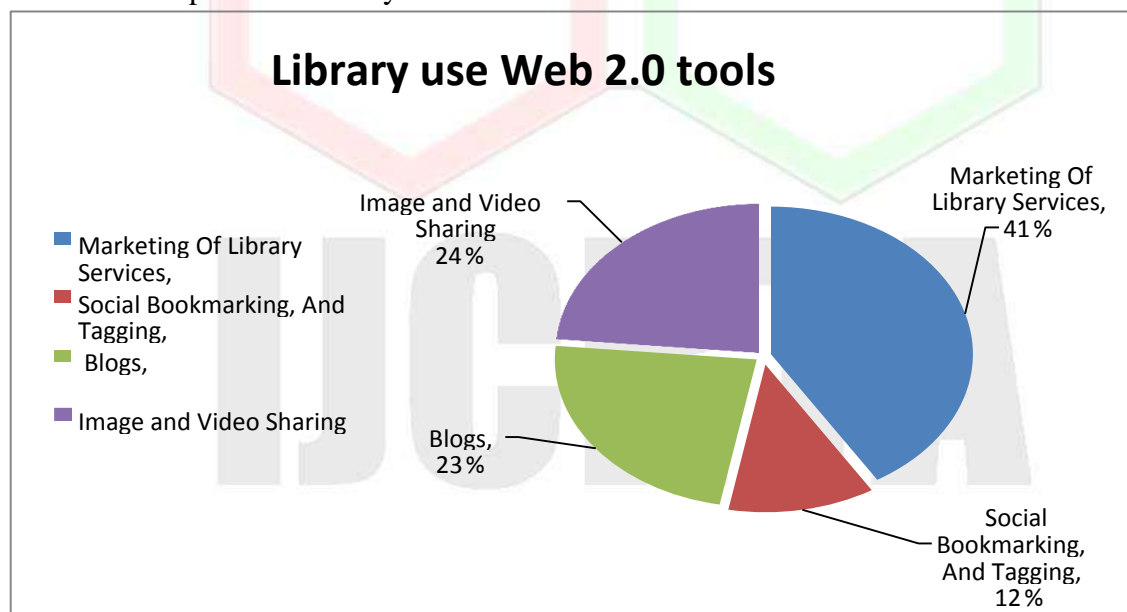


Figure 1.3 Purpose the Library use the Web 2.0 tools

The 41% of librarians use web 2.0 tools for marketing of library services, 12% librarians use social bookmarking and Tagging, 23% librarians use the blog and 24% librarians use Image and Video Sharing. The librarians use web 2.0 tools for Easiness of use, shared features, collaboration, fast-loading applications, interactivity, quick development times and real-time updates are all major trends.

2. Are you faced challenges while using Web 2.0?

Yes	8
No	32

If Yes, what challenges your library faced?

Challenges faced by the librarians	Frequency
Lack Of Motivation	1
Lack Of Fund	3
Lack Of Knowledge	2
Lack Of Training	3

Table 1.4 Challenges faced by the librarians

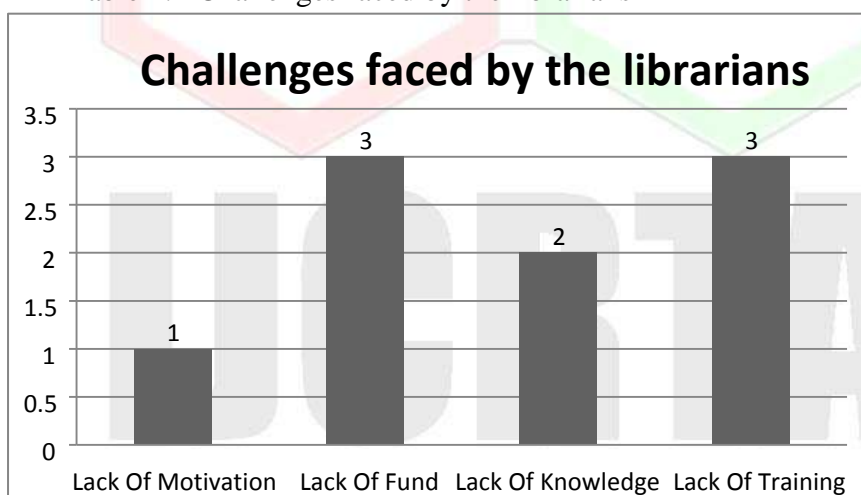


Figure 1.4. Challenges faced by the librarians

Figure 4.17 Challenges faced by the librarians:

80% of librarian respondents that they faced the problems while web 2.0 technology was introduced in libraries they faced the problems like lack of motivation, lack of knowledge, lack of

training and lack of fund and 20% of librarians did not face any problems when web 2.0 technology was introduced in the libraries.

CONCLUSIONS:

The World Wide Web has affected people across the world as there is an uprising in shared communication. Web 2.0 is the advances in communication which development is going on, as Web 2.0 offers the various facility to communicate in an appropriate way. Due to development in information, the tool of Web 2.0 offers libraries great and many chances to interact with their patrons and vice versa.

The libraries are using Web 2.0 applications on a great scale; they want to provide more and easy manageable services, which should be more close to the patrons and its help in promoting their resources.

RECOMMENDATION:

- Proper training should be provided to the librarians as well as to the users about the new technology
- College's libraries should develop the necessary standards, policies and plan about the adoption and use of emerging technologies.
- College's libraries should invest in adequate Internet facility, E- resources, books etc.
- College's libraries should select which Web 2.0 tools to adopt for the services of the users and for promoting of the services.

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