

How Far or Near to 24 X 7 Libraries? Analysis of Application of Web 2.0 Tools in University Libraries of Gujarat

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***Abstract.** In the 21st century, libraries should work with a concept of 24X7 accessibility and Web 2.0 tools are to be exploited to the maximum for providing information services and to serve according to the expectations of the users. The present study is focused on the application of Web 2.0 tools for providing information services in the university libraries of Gujarat. During the study, it was noticed that very few libraries have embraced the technology to provide information services. RSS is the major Web 2.0 tools that are in application, whereas blogs, Facebook, google docs, instant messaging, podcasts, twitter and YouTube are few other tools that are in use. In order to develop 24 X 7 libraries according to the present and future needs of the users, the library personnel are to be proactive, skilled and passionate to provide the web based information services. At the same time the users are also required to be well versed with this kind of technology.*

Keywords: Web 2.0, University Libraries of Gujarat, Web based Information Services, RSS, Blogs

1. Introduction

The present day libraries are undergoing a lot of transformations in terms of resources, services and information seeking attitudes of users. During the last two decades, there is a phenomenal growth of Information and Communication Technology (ICT) that has impacted tremendously on libraries. Around the world academic libraries started reaching the users with so many dynamic information services through their websites. Liu (2008) says that the academic library websites are the virtual presentation to the world. With the advent of Web 2.0 that has become the buzz word is now being used to explore new ways to interact on the Internet and for collaborating with fellow professionals (Bradley, 2007). Web 2.0 can be well articulated as the shift from simply being a website and a search engine to a shared network space that drives, work, research, education, entertainment and social activities, which especially all people do (Storey, 2006). According to PEW Internet and American Life Project (Lenhart et al., 2007) 64 percent of American teenaged between 12-17 years are involved in a wide range of content creating activities for the social networking sites they are used in their daily activities. This development has made libraries around the world keen to integrate Web 2.0 features (Harinarayana; Raju, 2010). Indian university libraries have also started embracing the technology so that they may easily outreach their users. Though it is a known fact that the technology is used and implemented in Indian university libraries, there is very little research that focuses on evaluation of Web 2.0 applications in libraries. It is likely that none of the research is focused towards the application or evaluation of Web 2.0 in the university libraries of Gujarat. Hence, the present study deals with the extent of usage of Web 2.0 in university libraries of Gujarat.

2. Objectives of the Study

In present day concept of 24 X 7 libraries, it is required to embrace the Web 2.0 technologies for providing seamless information to users. Beyond understanding the usefulness of implementation of Web 2.0 tools in the University libraries of Gujarat, India the present study will try to find how far these libraries are using the technology to reach out to their users by providing innovative information services. Thus this study will be helpful for the information professionals and researchers understand the impact of Web 2.0 technologies and providing such services. The objectives of the study are:

- To identify the Web 2.0 tools that are being used by the university libraries in Gujarat
- To understand the purpose behind the usage of Web 2.0 tools

3. Literature Review

3.1 What is Web 2.0?

While the Internet has provided the facility of decentralization and the ability to reach out to the users, Web 2.0 helps the librarians to quickly and easily provide information services by themselves. Downes (2004) suggests that the original vision of Web 2.0 is “read-write”.....*that the web itself was being transformed from what was called “the Read Web”, in accordance with Tim Berners-Lee’s original vision. Proponents of this new, evolving web began calling it Web 2.0 and in short order the trend became a movement.* Further Coombs (2007) opines that Web 2.0 is “a space that allows anyone to create and share information online – a space of collaboration, conversion, and interaction; a space that is highly dynamic, flexible, and adaptable”. The Web 2.0 tools are being used for providing different services like resource discovery, personalized information services, delivery of course content, e-learning etc. According to Manes (2006), Michael Casey was the first to coin Library 2.0 on his blog Library Crunch. Library 2.0 is based on applying Web 2.0 technologies in libraries for providing information services. The present study is focused on the application of Web 2.0 tools for providing web based information services in the university libraries of Gujarat.

3.2 Web 2.0 Technologies in Libraries

Linh (2008) conducted a survey to provide an overall picture of application of Web 2.0 technologies in Australian University libraries (AULs). It was found that two thirds of AULs have deployed the Web 2.0 technologies and only four technologies namely RSS, blogs, instant messaging and podcasts are used for some specific purposes with basic features.

Mahmood and Richardson Jr. (2011) surveyed the websites of 100 member academic libraries of the Association of Research Libraries (USA) and found that all libraries were using various tools of Web 2.0. Blogs, Microblogs, RSS, instant messaging, social networking sites, mashups, podcasts and vodcasts were widely adopted, while wikis, photo sharing, presentation sharing, virtual worlds, customized web pages and vertical search engines were used less. Librarians were using these tools for sharing news, marketing their services, providing information literacy instruction, providing information about print and digital resources, and soliciting feedback of users.

Shi and Chen (2011) investigated the application of Web 2.0 technologies accessing thirty Chinese University library websites within five weeks. The study reveals that two-thirds of Chinese university libraries deployed one or more web 2.0 technologies. Only one-tenth of libraries adopted more than four web 2.0 technologies among Chinese university libraries are not extensive or profound enough.

Mankori (2012) examined the extent of utilization of Web 2.0 in African university libraries and found that only few university libraries are trying to embrace the technology. He further suggested that across the globe, university libraries are increasingly using Web 2.0 system to support, promote and extend information services to their patrons. In the modern information world 2.0, it is important for university libraries to identify relevant Web 2.0 systems and integrate them into mainstream library and information services.

Gerolimos and Konsta (2011) documented the integration of Web 2.0 into the working framework of some of the most

advanced libraries in the world that is compared with the previous study that was conducted approximately two years ago. They noticed that when there is an increase in the integration of Web based services in the library, the user participation is less and sometimes it's difficult to measure their participation and utilization of the services.

Balaji and Kumar (2011) examined the effectiveness of library website by providing web based information services in South Indian Technological universities and found that deployment of mainstream web information services is not widespread as web information services are yet to take off widely in academic libraries. The majority of university libraries are found to be working in the conventional library settings and diffusion rate of web information services is relatively low.

ShriRam et al. (2011) had undertaken a study on the implementation of Information Technology with the aim of exploring the expectations of the users and their awareness and usage of such applications. They found that despite of Library Resource Center's efforts to provide Web 2.0 applications in its library services to provide Information Literacy, the users are still lacking the awareness about various Web 2.0 applications necessary for teaching and learning.

Though some good research surveys related to the application and implementation of Web 2.0 tools in libraries and web based information services were conducted at different places on the globe, however it was noticed that there is no research based literature that focuses on the survey and evaluation of Web 2.0 tools in the university libraries of Gujarat region. Thus, the present study focuses on the application and evaluation of Web 2.0 tools used in the university libraries of Gujarat.

4. Research Methodology

The study is based on content analysis that is used for qualitative approach. The list of universities in Gujarat state was collected from Education Department Government of Gujarat state (<http://gujarat-education.gov.in/education/index.htm>). The university websites were visited and library homepages were visited and searched. All links in the page were observed and noted for the implementation of Web 2.0 tools. The details of the data was gathered and observations were noted and then the data was analyzed to understand about the availability of implementation of Web 2.0 tools for providing different web based information services.

5. Data Collection and Research Sample

The survey was conducted from July 10th -31st 2012 and 1st – 10th December 2012. During the survey it was noticed that there are 48 universities (26 State universities, 4 State Agricultural universities, 2 Central universities, 2 Private Aided universities, 1 Central Deemed university and 13 State Deemed universities) in Gujarat state. To create the research sample, the list of 48 universities was created; their library websites were accessed to identify the application of different Web 2.0 tools in libraries. The list of libraries that are using Web 2.0 tools was created. As a result a subset of the whole research population was made up to five university libraries as mentioned in the Table No.1.

As there is no existing standard evaluation criteria to study about Web 2.0 a tool, a checklist is made in excel sheet based on the utilization of web 2.0 tools that is based on the literature reviewed and was adapted from different checklists. It is mainly based on the list of checkpoints for web content accessibility guidelines (W3C, 2008), Survey of the application of Web 2.0 in Australian University Web Sites (Linh, 2008) and Perceptions and usage of library instructional podcasts by staff and students in New Zealand, Universal College of Learning UCOL (Jowitt, 2008).

The checklist consists of questions along with alternative answers (Y = Yes = 1, N = No = 0) and the list of university libraries that apply any types of Web 2.0 tools. Mostly the Web 2.0 tools applied by libraries were available from the home page of the websites. If the links to those applications are not available on the home page then the second level pages were searched. Either the number 1 or 0 were filled in the corresponding cell on the checklist as mentioned in Table 1.

6. Data Analysis

As the checklist was made in excel sheet, and the checkpoints were assigned with either 1 or 0 values, the 'SUM' function of excel was used to calculate the types and purposes of Web 2.0 tools. Chart No.1 shows the percentage of libraries using different Web 2.0 tools.

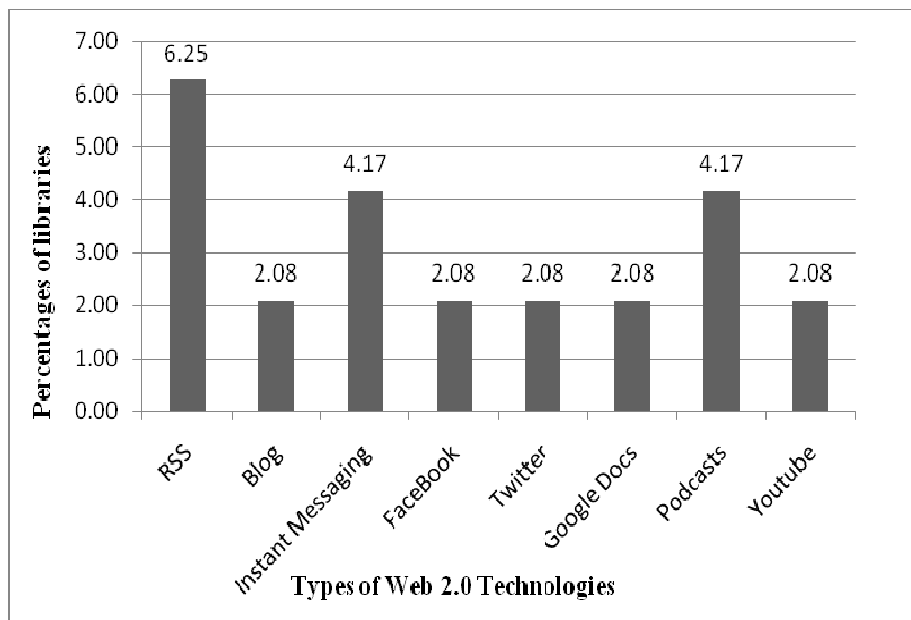


Chart 1. Types of Web 2.0 Tools

As shown in the Chart 1, eight types of Web 2.0 tools are employed by university libraries in Gujarat (RSS, Blog, Instant Messaging, FaceBook, Twitter, Google Docs, Podcasts, and Youtube). It is evident from the chart that 6.25 percent of the libraries applied RSS (3 out of 48 universities), 4.17 percent libraries are using Instant messaging and YouTube (2 out of 48 universities), and each 2.08 percent applied Blog, FaceBook, Twitter and Google Docs (1 out of 48 universities). It is evident that RSS is the only tool that is being utilized at the maximum because of its functional simplicity where as the other tools are least utilized.

7. Purposes of Web 2.0 Tools

The below mentioned are different purposes of applying different Web 2.0 tools at different libraries:

- RSS is used to provide library news and events, information about e-journals, databases, the current contents of subscribed e-journals. Libraries are also building their own RSS readers.
- A blog is used to provide information about news and events of the library, library services, new arrivals of books and periodicals
- Instant Messaging is applied to provide Reference services, to provide advice on library services, guidance about resources
- Facebook is used only to provide information about the collection of the library
- Twitter is applied to provide information about the library collection
- Google Docs is used to create and share documents, spreadsheets, presentation and for survey purposes.
- Pod Casts are used for library orientation and for providing general information.

8. Limitations

The data were gathered from the websites, which is a single segment. Beyond that the authors were unable to record the

portion of user participation and data accessed by them. It was not possible to document how many users have subscribed to the RSS feed services, number of reviewers of Face book, etc. As a result the researchers were unable to study users' approach and inclination towards Web 2.0 tools in university libraries.

9. Recommendations

In general, it was noticed that very few library websites are dynamic with rich resources and implementing Web 2.0 tools for providing some information services. Hence, it is necessary that all university libraries should possess dynamic library websites to provide information services that will help the users to get relevant information instantaneously. The multimedia Web 2.0 tools like podcasts, Vodcasts, streaming, file sharing, online communities are to be formed and encouraged which further helps in the increase of the Web visibility of university library websites.

It is important to conduct user evaluation studies related to user information needs to deploy necessary Web 2.0 tools to provide Web information services as well as post launch studies to understand the user satisfaction levels.

The library staff should be proactive to provide information literacy related to the application and importance of Web 2.0 tools in the libraries.

10. Conclusion

In the present study, though it was noticed that there are very few university libraries in Gujarat that are applying Web 2.0 tools for different purposes, the study has a lot of impact as it addresses the application of Web 2.0 tools in libraries and throws light on areas for further research that are to be required to study that will bring a phenomenal change towards adapting Web technology for providing different information services. During the study the authors were dwelled with different questions that may be taken up for further investigations on the impact of Web based technology in Libraries. To mention a few, problems faced by library manager in successful implementation of Web 2.0 tools and their promotion, enhancement of library services through web 2.0 applications, technological influence of perceiving and information seeking behavior of library users etc.

In the 21st century, libraries should work with a concept of 24X7 accessibility and Web 2.0 tools are to be exploited to the maximum for providing information services and to serve according to the expectations of the users. In order to provide the web based information services the library personnel are to be skilled as well as passionate enough to adapt and implement new technology for providing services. At the same time the users are also required to be well versed with this kind of technology. Otherwise, it is necessary to provide Information Literacy to the required users about the functioning of the library and services provided through web technology. It is always necessary to understand the users perceiving capacity of different web based services before planning to provide new web based services.

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