Library 2.0 and Beyond: Remodeling Today's Library

Pranjit Kumar Thakuria   *Gagan Chandra Talukdar*   *Rajashree Borkakoti*

Abstract

The paper briefs upon 'Library 2.0' as well as 'Semantic Digital Library', the new features of library service facilitating the application of interactive, collaborative, and web based technologies. It is user-centered virtual platform for mutual benefit in multidisciplinary perspectives. Library 2.0 is socially rich hub of information and a platform for virtual community to share their innovative ideas. It is all about reengineering of library services in the light of re-evaluating of user needs and the opportunities produced by new technologies. The paper states about web 2.0 applications in knowledge management and regarding mindset of information seekers. There is no doubt that Libraries are struggling to cope with the changing scenario in perspective of current innovations and provide services that skillfully make use of the current information technology. The concept of semantic web is the major advancement in the web technologies. The opportunities that have been created by web 2.0 for the information professionals at the wake of semantic web technologies.

Keywords: Library 2.0, Library 3.0, Web 2.0, Semantic Digital Library, Semantic Web, ICT, Hyperbook

1. Introduction

The world of information technology is undergoing rapid changes in the history of civilization. The day has arrived when it is most important to learn to access, analyze apply and evaluate such information. As traditional custodians of information, librarians need to be aware of the implications of these changes and develop technological and managerial skills, which will enable them to make effective use of information. The transformation of library and information centers into service oriented association is of crucial need of the hour in 21st century. The unprecedented developments in the field of ICT and the rapid advancements in the W3 and telecommunication technologies have greatly redefined the concepts of information, especially the way how to manage, access, and disseminate. The new information technology facilitates to dig the information anywhere from the entire digital ecosystem while it has also redefined the mindset of users.

In recent time, there is a dramatically changes in library and information service due to technical changes in computing, communication and collection. At the same time the librarians also striving to cope with these changes to meet their users' need. The library 2.0 is a model for revitalizing the digital library system to encourage purposeful changes, inviting user participation in creation of both the physical and virtual content they want supported by consistently evaluating services. The recent technology has given users driven 2.0 environments.

2. Library 2.0

The concept of library 2.0 generated from that of web 2.0 is a modernized form of library services focused in user oriented revolution and participative management. It features flow of information i.e. from library to user, user to library, library to library and user to user. Almost all libraries are known today can be defined as library 1.0 where resources are kept on shelves or in database system. Here the resources can be taken out at counter for given period of time and checked in to the library over due period for someone else to use. It is one directional service to the users [3]. Library 2.0 as it is commonly known as a system of new features to the users by bringing library service to internet and getting the users' more involvement with feedback participation which is more relevant in aspects of TQM application in a library. Ultimately, the library 2.0 will replace outdated, one directional service with high quality information service where usability, interoperability, and flexibility of library system are vital input. It makes the library more transparent through its web presence and its physical design. The basic force is to get people back into the library by making more relevant to at

he wants and need in their daily lives to make the library a destination.

2.1 Library 2.0 Defines- [2]

❖ Library 2.0 offer services as people want, not as current libraries do that most people don't want.

❖ Library 2.0 is the only way libraries will remain viable.

❖ Library 2.0 is a paradigm shift that changes almost everything in a library.

❖ Library 2.0 means making the library space (virtual and physical) more interactive, collaborative, and user driven.

❖ Library 2.0 is an attempt to bring library services at par with what people expect in web 2.0 environments.

❖ Library 2.0 is a new dimension of library services in association with all information service providers.

❖ Library 2.0 is a more exhaustive way of sharing all the resources among the networked libraries.

❖ It is like a hyperlink in between library 1.0 and innovative web 2.0 services. It is a library for 21st century, rich in content, interactivity and social activity.

❖ Library 2.0 features may not be feasible or useful for all communities and libraries

2.2 Features of Library 2.0

❖ In library 2.0 model library services are frequently evaluated and updated to meet the changing needs of library users. [2]

❖ Library 2.0 calls for libraries to encourage user's participations and feedback in total quality management of library services.

❖ Information and ideas flow in both directions from library to the user and from user to the library

❖ The user is participant, co-creator, builder and consultant whether the product is virtual and physical.

❖ User harvests and integrates ideas and products from peripheral fields into library service models continuously.

❖ Continuous evaluation is a key component of library 2.0. The new services and charges must be familiar. They include blogs, RSS feeds, chat IMS, wikis, My space, facebook, netflix, flickr, etc.

❖ It is user-centered, multimedia, socially rich and communally innovative. It takes the form of

user feedback, user reviews, and user-crafted social networks.

❖ It depends on high level of user participation to expand the value of information resources.

❖ Holistic approach to Library 2.0 is not only a way of searching, but also finding, not about access, but sharing

❖ It inspires active participation and makes users more scope to build him user friendly to the information system.

3. Web 2.0 and Library Services

Web 2.0 is a term coined by Dale Doughterty of O'Reilly Media in 2004 to distinguish between the old and new generation of websites, but it had no clear definition when it was coined. According to O'Reilly, Web 2.0 is the 'business revolution in the computer industry caused by the move to the internet as platform, and an attempt to understand the rules for success on that new platform. [5] Web 2.0 is a widely used and wide ranging term (in terms of interpretations) made popular by Tim O'Reilly. Web 2.0 is that where 'ordinary' users can meet, collaborative, and share content using social software applications on the web. There are many popular examples that work along this collaboration and sharing meme, Bebo, Digg, Flickr, Technorati, Orkut, Wikipedia, etc. In short, Web 2.0 is all about being more open, more social, and through user-created content, and cheaper.
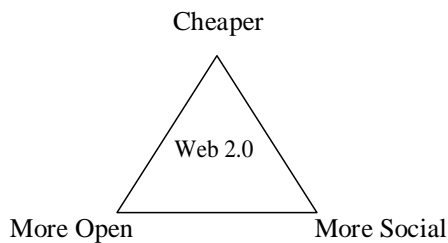
Figure 1: The main Aspect of Web 2.0

Few world ranking Universities having library 2.0 feature are: university of Cambridge (www.lib.cam.ac.uk/), Yale University (www.Library.yale.edu/), Imperial College London (www.imperial.ac.uk/ library) [5]

3.1 Web 3.0 or Semantic Web

Web 3.0 or Semantic web is "an extension of the current web in which information is given well-defined meaning, better enabling computers and people to work in cooperation". The word 'semantic' stands for 'the meaning of', and therefore the semantic web is one that is able to describe things in a way that computers can better understand. [3]

The transition of web technology shows the following revolution in information resource sharing-[1]

Web 1.0	Web 2.0	Web 3.0
Personal Websites	Blogs	Semantic Blogs: Semiblog, Haystack
Content Management Systems, Britannica Online, OPAC	Wikis, Wikipedia WebOPAC	Semantic Wikis: Semantic, MediaWiki, Platypus, dbpedia Semantic OPAC
Google, Altavista	Google Personalised, DumbFind, Google Scholar, Book Search	Semantic Search: SWSE, Swoogle; Semantic Digital Libraries: FEDORA, Greenstone, BRICKS, SIMILE
BuddyLists, Address Books	Online Social Networks	Semantic Social Networks and Information Spaces: FOAF, People Aggregator, Gnowsis

Table 1: Move form Web 1.0 to Web 3.0

3.2 Semantic Digital Library (Library 3.0)

Digital libraries now becomes multidimensional in today's world of fast growing information society. Semantic digital library (Library 3.0) is the next step in the evolution of current generation of digital library management systems. Its main features are-[1]

❖ Anyone can use it

❖ All knowledge is accessible here

❖ We can access it anytime and anywhere

❖ It features a user-friendly, multimodal user interface

❖ It provides efficient and effective ways to access it

❖ It makes use of multiple and interconnected devices

The semantic digital library is made of hyperbooks instead of traditional e-documents such as PDF or HTML files. Hyperbook, or hypertext book, is a term that is commonly used to refer to a hypertext that has some of the characteristics of a printed book. The main distinction between a traditional digital library and a semantic digital library is the disappearance of the monolithic nature of a book or an article. A hyperbook, once inserted in into a library, will automatically enrich itself by connecting to fragments of other books. Thus, a semantic digital library of hyperbook is not a mere collection of hyperbooks, it provides a semantic interconnection structure among the hyperbooks.

4.   Library 2.0 and Beyond for All the Time

Older and traditional services can be Library 2.0 if criteria are met. Similarly, being new is not enough to make a service Library 2.0. Already many libraries have made encouraging advances in their electronic offerings by providing access to top-

quality databases, downloadable audio books and music, and instant messaging reference services. Currently, libraries have a tendency to plan, implement, and forbid the outdated service culture. Library 2.0 and Library 3.0 attempt to change this regularly soliciting customer feedback and evaluating and updating services. Both new and existing library services should be revisited routinely to ensure that they are still meeting expected goals. Even older, traditional library services should be reviewed with a fresh eye to determine if any aspect needs updating. The competencies and awareness of latest information technology for library professionals are vital needs for the success of or demand for library 2.0 and beyond for all the time.

5.   Opportunities for Librarians and Competencies Required in the Web Environment

The librarians have a great role to play in Library 2.0 environment. The Library 2.0 environment in which librarians work is changing in terms of greater access to a range of information, user participation, increased speed in acquiring information, greater complexity in locating, analyzing and linking information, constantly changing technology and adaptation, lack of standardization of both hardware and software, continuous learning for users and staff, management of financial investment for technology. The role of librarian in the Library 2.0 environment is beyond imagination. [6] They would play a more dynamic role than at present as guides to the information seekers. To sustain in the field of librarianship, librarians need to equip with technical skills such as knowledge of HTML, programming languages, knowledge of hardware basics and troubleshooting, understanding of software programs, and the skill to search, display,

and retrieve data effectively in a variety of information retrieval systems. A library & information science student should possess the aptitude and ability to work with modern technologies in the field of information science.

6.   Suggestion and Conclusion

The world is changing in respect of information sharing in only one terminal in multidisciplinary format. Library 2.0 is such kind of system in the light of changing user expectations expanding their services by providing user-centered services via web 2.0 facilities. There is a scope for collaboration and participation which are most important features of library 2.0 and library 3.0. Librarians must have to adopt these changes judiciously and quickly for quality rating of the libraries in today's context. To do so web 2.0 or web 3.0 features have to be implemented in library information system at one point in time. But to what extent the web 2.0 features to be adopted in library are need to be examined. Thus, the idea of library 2.0 represents a significant paradigm shift in the field of library services. Currently, libraries have a tendency to plan, implement, and forbid the outdated service culture. Both new and existing library services should be revisited routinely to ensure that they are still meeting expected goals. Even older and traditional library services should be reviewed with a fresh eye to determine if any aspect needs updating.

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About Authors

Mr. Pranjit Kumar Thakuria, Sr. Library Information Assistant, Central Library, IIT Guwahati. Guwahati- 781039, Assam.
E-mail: pranjit@iitg.ernet.in

Mr. Gagan Chandra Talukdar, Librarian, Sneha Bandhan Children Library, Guwahati.
E-mail: gagan4may@gmail.com

Miss Rajashree Borkakoti, Ex-Student, DLIS, Gauhati University, Guwahati- 781014, Assam
E-mail: rajashreeborkakoti@gmail.com