Tagging and Social Bookmarking: Tools of Library Services in Digital Era

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Abstract

In the web 2.0 environments, Tagging and social bookmarking play a major role in knowledge organization and management in the field of library services. Bookmarking tools like delicious, twitter, flickr, connotea, etc are very popular and useful regarding the use of internet and web resources in a systematic and scientific way. It integrates and accurate the unlimited data and explosive information over internet and World Wide Web in a very controlled manner. This paper explains the various aspects of tagging and social bookmarking and the practical experiences in modern library services in the digital era.

Keywords: Tagging, Social Bookmarking, Web 2.0, Collaborative Tagging, Controlled Vocabulary, Taxonomies, Personamy, Tag Clouds

1.   Introduction

The web2.0 is a very user friendly technology ever invented. Web 2.0 has led to the development of large web-based communities that support and facilitate collaboration among its users. Tagging and Social Bookmarking are such the system among others that has been popularized by web 2.0. Tagging is a new way to assign keywords to internet resources by its users. Again Social Bookmarking system allow users to specify keywords or tags for web resources that are of interest to them, helping them to organize and share these resources with others in this community.

The concept of knowledge organization and management in libraries are developing now-a-days. The exponential growth of information resources on the internet and www has necessitated the need to more effective approaches and implementation of tools for organizing information to achieve user satisfaction. It also needs the control over the resources available in online. To keep the control over knowledge management, library management developed tools like classification schemes, ontology, taxonomy etc. But Tagging and social bookmarking is a new concept familiar with knowledge management from the users end. The various bookmarking tools like delicious, flickr, connotea etc. are used to store bookmarks online, tagging website, picture etc. thereby making them accessible from anywhere to anyone

2.   Tagging: Definition and Concept

In online computer system terminology, a tag is a non-hierarchical keyword or term assigned to a piece of information (such as an intern bookmark, digital image, or computer file). This kind of metadata helps describe an item and allows it to be found again browsing or searching. Tags are generally chosen informally and personally by the items creator or by its viewer, depending on the system.

The concept of tagging implemented in connects has been widened far beyond website bookmarking

and services like Flickr (photos), You Tube (videos) and audio (podcasts) allows a variety of digital artifact to be socially tagged. Ivision's tagging service components is an experimental service that allows members of public to tag news online items. The idea of tagging has been expanded to include what are called tag clouds: group tags (tag sets) from a number of different users of a tagging service, which collates information about the frequency with which particular tags are used. This frequency information is often displayed of use are displayed graphically as a 'cloud' in which tags with higher frequency of use are displayed in larger text. Large organizations are beginning to explore the potential of these new tools and their concepts for knowledge management across the enterprise.

In order to enable visual browsing, social tagging tools typically provide an interface model known as tag cloud when user's access the information in these structures, it is presented in the form of a cloud when users access the information in these structures, it is presented in the form of a cloud consisting of the most popular tags, where the larger in the font size of a tag, the more popular it is on the site.

3. Tagging: Types

Tagging can be divided into two types: Simple tagging and collaborative tagging

3.1 Simple Tagging

Users describes their own resources or items, such as photos on flickr, news on dig or videos on YouTube, but nobody else tags another users resources. Usually the author of the resources is who tags it. This means that no more than one user tags an item. In many cases, like in flickr, YouTube, simple tagging systems include an attachment to the resource as not just a reference to it.

3.2 Collaborative Tagging

Many users tag the same item, and every person can tag it with their on tag in their own vocabulary. The collection of tags assigned by a single user creates a smaller folksonomy also known personamy. As a result several users tend to post the same item. For instance, citeulike and delicious are based on collaborative tagging, where its resource (papers, books and URLs respectively) could be tagged (therefore annotated) by all the users who considered it interesting.

4. Tagging: How to Do Tagging?

Social bookmarking tool help the users to tag their favorite item such as websites, photograph, books and blogs are even tag. Sites like delicious, Flickr, connotea etc. has the provision to do tagging at free of cost in which users can open one account in these sites to store their bookmarks.

Tags include the name of the URLs, title of the resources, comments or annotation, keywords, name of the users and the data in which it is created. These sites are doing periodically verification of the bookmarks. It enables user to see the related bookmarks and the tags they are used. Each user will get personal page to display the bookmarks which contains all the bookmarks have ever created, which will be arranged in reverse chronological order with all the tags by the user. Now user can choose a tag which is meaningful to him. Once the tags have been assigned, they acts as index terns and they may be private or public.

5. Tagging: Benefits

❖ It is up to date as it can include new concept.

❖ Tag is offering a new way of to organize web resources where one can gather all the related resources in a particular field

❖ Increases the chance to find out a particular resources

❖ Helps to connect people having the same interest

❖ Identify the topic of bookmark items(any web resources)

❖ Can be used in academic environment like course related references etc.

❖ Compare to any traditional taxonomy, it is multi-dimensional as one bookmark can belongs to different tag-groups.

❖ Promote sharing of information as tags are open to all

❖ Also creates a virtual world of productive information for the people in many enterprises

6. Tagging: Demerits

❖ The user defined tags like other uncontrolled vocabulary share problem like ambiguity, polysemy, synonymy etc.

❖ Variation in spelling

❖ Use of abbreviations and acronyms decreased the chance to discover real resource

❖ Common problems like neologism, slang, jargons, neologism etc.

❖ Use of personalized terms like me" my world" etc. effects the usability

❖ Due to cognitive structure of the individual in knowledge organization, acceptable solution for everybody is not possible

7. Tagging: How to Overcome these Problems?

❖ Combination of both user defines tags and controlled vocabulary by using the project like "myedna" supported by the government of Australia

❖ Adding more keywords to resources will help to reduce the ambiguity. Clustering of related tags and associate clusters with ontological concept also solve the problem of ambiguity

❖ Checking the tags with online dictionary may help to overcome spelling error problems

❖ Use of tools like "word net-synset", making clusters based on the related tags rather than related URLs helps to avoid the problem of synonyms

8. Examples of Some Social Bookmarking Sites

8.1 Delicious (http://www.delicious.com)

Delicious was first released in September 2003 by Schachter. It is a social bookmarking service which allows users to tag, save, manage and share web-pages from a centralized source with emphasis on the power of community. These improve how people discover, remember and share on the internet. It uses a non-hierarchal classification system in which users can tag each of their bookmarks with freely chosen index terms (folksonomy). A collective nature makes it possible to view bookmarks added by similar-minded users.

8.2 Citeulike (http://www.citeulike.com)

Citeulike has been available as a free web service since November 2004. It helps scientist, researchers and academics store, organize, share and discover links to academic researcher papers. It is highly helpful for academic activities due to its following features-

- ❖ Easily store references found online
- ❖ Discover new articles and resources
- ❖ Automated article recommendations
- ❖ Share references with peers
- ❖ Find out who's reading

8.3 Connotea (http://www.connotea.org)

Nature publishing group created connotea as a free online reference management service for scientist, researchers and clinicians in December 2004. Connotea is aimed primarily at scientists and while users may bookmark any webpage they choose, it incorporates special functionality for certain academic resources, recognize a number of scientific websites and automatically collect metadata for the article or page being bookmarked, including author and publication names. It is also possible to add non-recognized web pages, by manually entering information.

8.4 Stumble Upon (http://ww.stumbleupon.com.)

It was founded in December 2001 by Garrett Camp, Geoff Smith, Justin Lafrance and Eric Boyd during Garrett time in post-graduate school in Calgary, Canada. It is an interesting tool that takes aspects of social bookmarking and wraps them up in a neat little button that will take the searcher to a random site matching his interests. It helps to discover and share great websites. The site may explicitly recommend by the users and other web surfers with

interest similar to the searcher. It uses rating to form collaborative opinions on website quality. When one stumbles, it will only see pages that friend and like-minded stumbles have recommended. This helps him to discover great content which one probably would not find using a search engine.

8.5 Twitter (http://twitter.com.)

Twitter is a privately funded, start up with offices in the SoMa neighborhood of son Francisco, CA, Started as a side project in March 2006. It has grown into a real time short messaging service that works over multiple networks and devices. In countries all around the world, people follow the sources most relevant to them and access information via Twitter as it happens-from breaking world news to updates from friends.

Twitter is ranked as one of the 50 most popular websites worldwide by Alexa's analysis. In March 2009, a nielson.com blog ranked twitter as the fastest-growing site in the member communities' category for February.

8.6 Digg (http://digg.com/about/)

Kevin Rose started digg in November 2004 along with Owen Byme, Ron Gorodetzky and Jay Adelson. Digg is a platform for people to discover and share content from anywhere on the web from the biggest online destinations to the most obscure blog. Digg surfaces the best stuff as voted on by the users. It provides a place where people can collectively determine the value of content and support changing the way people consumes information online.

It is an Elsevier online collaborative research tool that enabled researchers to share bookmarks,

references or any linked materials with their peers and colleagues. Users can share, collaborate and discuss resources either in private groups or openly with the wider scientific community. Through the integration of 2collab into other scientific platform such as Science direct and Scopus a lot of researchers are enabled to transport not only the bookmark but also the bibliographic data of research papers into their accounts.

9. Social Bookmarking: Who is Doing It?

Social Bookmarking dates back just a couple of years when sites like furl, simpy and delicious began operating. Other social bookmarking sites include delicious an open source version of delicious and citeulike, a social bookmarking is particularly useful when collecting a set of resources that are to be shared with others. Anyone can participate in social bookmarking.

10. Features of Social Bookmarking

❖ Creation of personal collection of bookmarks and share it with other users or with members of a particular group.

❖ Allows classification/categorization/indexing of bookmarks.

❖ The tagging also enables people to store bookmarks in more than one category which makes it non-hierarchical and inclusive.

❖ Allows users to browse collections of bookmarks of users and they require a certain participation to become successful.

❖ It identifies other users with similar interests, identifies resources tagged similarly to one's resources.

❖ Tags can be subscribed by other web users using RSS.

❖ Unlike traditional search engine it stumble upon new and interesting sources and users.

11. Social Bookmarking: why is it significant?

Now a day, it is significant because it give users the opportunity to express different perspective on information and resources that continue to influence the ongoing evolution of folksonomies and common tags for resources. Using a folksonomy based tool for resources lets you take advantage of the insights of other users to find information related to the topic you are researching, even in areas that aren't obviously connected to the primary topic.

12. Social Bookmarking: Where is it Going?

Social bookmarking is a simple technology both for web sites offering services and for users. The ideas that social book marking is built on are working their way into other application; the practice of tagging information is being extended to other type of resources, such as multimedia files and email.

13. Social Bookmarking: What are the Implications for Teaching and Learning?

Tagging information resources with keywords as the potential to change how we store and find information. Social bookmarking simplifies the distribution of reference lists, bibliographies, papers, and other resources among peers or students.

Following are some implications of social bookmarking in the field of teaching and learning

❖ Listing of relevant course materials by the teachers for their learners to read

❖ Establish specific tag (within a group of tags) that is used to direct individual students to specific readings or resources

❖ Supports students to learn the use of RSS and to have RSS feed

❖ Rate and review bookmarks to decide on usefulness of resources

❖ Share one social bookmark account between a number of trainers to create and share a board set of resources

14. Social Tagging in Libraries

Social tagging lowers barriers for the participation both for library patron and staff. While library catalogue and databases rely on controlled vocabularies and traditional subject guides and pathfinders often address only broad categories, tags allow library staff to assign worthy links multiple tags. Tagging is often controversial among libraries, largely because adding keywords to resources lacks authority control. But libraries employing **del.icio.ous** and other social bookmarking tools can use the lack of controlled vocabulary to their advantage.

Some libraries have been addressing the authority control issue by bundling tags according to the Dewey classification. And in the case of the Sorbonne in Paris, tags are grouped together by time period, discipline, format, country and language, thus combining the traditional and web 2.0 worlds to provide access to professionally evaluated, high quality electronic resources.

Social tagging can be applied in the following aspects

❖ User defined meaning for content

❖ Helps organize store information

❖ Social aspects-connect with other researches

14.1 Pros

❖ Search using own language

❖ Related article and user recommendations

❖ Organize and discover grey literature

❖ Connect with people sharing common interests

14.2 Cons

❖ Loss of controlled vocabulary, taxonomies, ontologies

❖ Content often not peer reviewed

❖ Site licenses may restrict usage

❖ Complacency with other peoples reading lists

15. Conclusion

Web 2.0, through its numerous definitions, encapsulates the idea of the proliferation of interconnectivity and the interactivity of web-delivered content. When it comes to online social networking, website is commonly used. These websites are known as social sites. Social networking websites function like an online community of internet users. Depending on the website in question many of these online community members share common interest in hobbies, religion, politics etc.

Once you are granted access to a social networking website you can begin to socialize. This may include reading the profile pages of other members and possibly even contacting them.

By making the information retrieving interlink, rather than being standalone, the value can be added to the experience of internet surfers in general and learners in particular.

Tagging and social bookmarking plays an important role to build participatory library services in digital era through social networking websites in an online environment. Social bookmarking includes diversity because the internet gives individual from all around the world access to social networking sites.

References

1. BRADLEY, Phil. How to use Web 2.0 in your library. London, Facet Publishing, 2007. P. 79-94.

2. Things you should know about Social Bookmarking. Available at http://net.educause.edu/ir/library/pdf/ELI7001.pdf Accessed on 12/12/2011.

3. http://www.delicious.com

4. http://www.citeulike.com

5. http://www.connotea.org

6. http://www.stumbleupon.com.

7. http://twitter.com.

8. http://digg.com/about/

9. http://www.2collab.com.

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