

Benefits of Integrating Folksonomy Based Systems into the Public Library

Kaitlin M.L. Kehnemuyi

651-02 Fall 2014

Assignment #3

November 20, 2014

### **Introduction**

While the concepts of Web 2.0, Library 2.0 and folksonomies are relatively new, libraries have been organizing works and people have been searching libraries since the Library of Alexandria. The term Web 2.0 came about in 1999 to describe the change from a static Internet to a dynamic user involved, creator/consumer version of the Internet that was developing. Web 2.0 is marked by user engagement with content and user created content, thus making the experience more vibrant for the users. (Stephens & Collins, 2007) Web 2.0 lead to the development of many new applications such as blogging, RSS, social networks, and information sharing sites, such as Flickr or YouTube. (Xu, Ouyang, & Chu, 2009)

With the development of Web 2.0 came the ability for users to add their own metadata to photos, websites, blogs, etc., which in 2004 became known as “folksonomy” or tagging. Thomas Vander Wal is credited with creating the term folksonomy, an amalgamation of “folk” and “taxonomy”, to indicate a classification by the people. Folksonomy is the use of words that might normally be used as descriptors but are instead become “tags” to classify items by people or “taggers”. (Furner, 2009) Even though the use of taxonomy as a base of the word suggests a hierarchy, folksonomies are a flat-based classification system. No one tag is necessarily higher or better than another.

The term "Library 2.0" was coined in 2005 by Michael Casey to describe a new movement towards a version of library service, which fosters user participation through engagement in physical and virtual services. It is also a system that evolves through evaluation to reflect the needs of the user. (Casey & Savastinuk, 2006) Library 2.0 is marked by four essential elements: it is user-centered, it provides a multimedia experience, it is socially rich, and it is

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communally innovative. (Mannes, 2006) By utilizing folksonomy and user tags, along with other applications developed for Web 2.0, libraries can achieve the concept of Library 2.0.

Libraries are integrating folksonomy systems into their work through many different programs and in many different ways. Delicious (delicious.com) is a social bookmarking site that allows users (libraries) to bookmark websites and organize them in different categories.

LibraryThing (librarything.com) for Libraries is a program that integrates into a library's current cataloging system to enhance the user's search by providing additional tags and information to the books available at libraries. Pinterest (pinterest.com) is an application that allows users to create boards that group items together, these boards are used as visual bookmarks and aid with discovery.

### **Folksonomy in Public Libraries**

East Brunswick Public Library (EBPL) in New Jersey uses LibraryThing for Libraries along with its online catalog; Jersey City Public Library (JCPL) does not. When a patron at EBPL or JCPL library accesses either's online catalog to search for A Discovery of Witches both libraries return results that list the title, author, ISBN, publisher, date published, where copies are located and if they are available. The listing at EBPL includes a picture of the cover so a patron can easily identify what they are looking for, links to the other books in this series, reviews of the book and links to the themes in the book that are in other books that a patron might want to read. Currently if a patron is interested in reading A Discovery of Witches from JCPL the patron would not learn from the catalog that it is the first book in a series. They would have to use other websites such as Amazon (amazon.com) to learn more about the book other than its call number. Tagging provides more information for the patron about the books that they are interested in. A

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library's catalog should be just as user friendly as a bookseller's website. We want patrons to engage in the library more, not send them to another website for information.

Tagging and social bookmarking are already integrated into patron's use of the internet, in 2006 a Pew Internet & American Life Project found that 28 percent of internet users have tagged and that 7 percent of internet users say that they use tags daily. (Rainie, 2007) Since that study was done tagging has become more prevalent in social networking platforms and other websites. Patrons are becoming more comfortable with tagging through Instagram (instagram.com), Twitter (twitter.com), Facebook (facebook.com), Flickr (flickr.com), Delicious, etc. Tagging has become so ingrained to social networking that people are likely participating in this phenomenon without realizing it and it will become more commonplace as more organizations integrate it into their services. (Rainie, 2007)

Even though Library 2.0 is marked as "user-centered" (Mannes, 2006) there are parts of the library that have not changed to fit the patron's schedule, such as being closed on Sundays. Recent budget cutbacks have forced some library systems to be closed all weekend or to close earlier during the weekdays, making it harder for people to access their local library services. Tagging and social bookmarking establish additional ways that the user can still benefit from the library information structure without being at the physical library or talking to a librarian. Using a service like Delicious allows the library to present organized links to websites when the patron is using the library remotely by offering access to librarian curated content from any computer. (Rethlefsen, 2007)

Searching on the internet is presented as a quick and easy manner to find information, but patrons can often be overwhelmed or end up with misinformation. Utilizing social bookmarking services allows librarians to add their expertise to searching on the Internet. Elmborg (2006)

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discussed the issue of how search engines are now providing a value-neutral answer for reference questions. The value of librarians is the humanity that they bring to the reference question/answer process. It is no longer enough to provide neutral information to the patron, that information can be retrieved from typing your question into a search engine. A simple search on Google.com for “patent information” produces a page with 21 links on it, 11 of which are ads. Is the patron well versed enough in searching to understand which link will provide him with the best information or is he going to click on the top result, which may be an ad? Internet search may be presented as a “quick” option but may end up taking up more of the patron’s time. Using a service like Delicious would allow librarians to provide reference assistance without being with the patron physically. Providing information that helps patrons when the library may not be open only adds to the value that libraries provide to communities. Being able to provide service to patrons when the traditional library setting is not available is key for survival for public libraries.

The Muncie Public Library in Indiana is utilizing Pinterest ([pinterest.com](http://pinterest.com)) to create recommended lists of books. Pinterest is a website that allows users to tag/organize items from the Internet to different “boards” to create different collections. Muncie Public Library has created and joined boards for multiple different age groups and interests for patrons, ranging from early literacy to crafting, to technology, to (my personal favorite) “MPL Photo of the week.” The photos in “MPL Photo of the Week” showcase different services available to the public from the trees they printed on their 3D printer, to their computer basics class and their *Twilight* party. They are using a free program to update and show how they are a part of the community.

A curated list of links for local and national government information that is frequently requested, along with links to issues that concern one’s patrons and/or interest of patrons shows

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that the library is actively engaged with the community. EBPL has a site on their page, (EBPL Recommended Websites: Best of the Web, 2014) which allows them to provide assistance to their patrons outside of the traditional library setting, including a specific link to assistance post Hurricane Sandy. Instead of having to update the library's websites to reflect current reading trends or books needed for classes, these services can be updated quickly and on the fly with minimal costs for labor and using the programs. In some cases, there is no cost for using the programs, (Kroski, 2005) which is helpful, because as Casey and Savastinuk (2006) pointed out, the majority of libraries are unable to afford the IT department to create and maintain these programs.

User tags can help break rigidity and encourage inclusivity of groups that may feel underrepresented in the library. Subject headings often cannot move fast enough to reflect the terms that people use to self-identify, which can make groups of being feel excluded from the library setting, (Sanders, 2008) as well as make it more difficult for users to find what they are looking for. A comparison by Bates and Rowley (2011) of LCSH headings versus tags applied to books in LibraryThing's folksonomy showed that embedded tags can be an excellent tool for finding underrepresented resources, such as LGBTQ literature. (Bates & Rowley, 2011) LibraryThing allows for 15 tags per book, which increases the chances of a successful search. Returning to the question of the LBGTO search, patrons are able to search with various keywords, which they may feel are better suited for a book, such as "lesbian" or "transgender" versus "gay".

Tagging can increase the serendipitous recommendations. One of the benefits of tagging is the ability to use it for resource discovery. (Furner, 2009) Folksonomy based cataloging is not tied to hierarchy of falling into one category only, a system where books are tied to an "OR"

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(this book is either a mystery or a romance) but can be part of an “AND” system (this book has both elements of mystery and romance). Once a patron has read all of one author that they enjoy, who or what do they read next? Tagging can help patrons discover different authors and genres to expand their literary world. It helps remove a part of the risk of picking up a random book from the shelf to experiment. A patron might try to read *Twilight* and dislike it and decide that he does not enjoy any vampire books, when in reality he does not like romantic vampire books but may enjoy horror vampire. A study of a serendipity-oriented recommender system based on folksonomy showed that the system was able to serendipitously recommend books to users that they enjoyed. (Yamaba et al., 2013)

Typically fiction books are broken down into literature, romance and mystery for patrons. And that is as specific as it gets within defining characteristics of these books. Subject headings may imply that two books are similar but to a patron they may be totally different books. Patrons are generally looking for certain characteristics within books that they want to read. (Boter & Wedel, 2005) What attracts one patron to romances may not be the same thing that attracts another patron. A romance set in the Wild West can be next to one set in outer space if their authors have similar last names. Boter and Wedel (2005) looked at how user perceptions could be used to organize collections. While they used library loan transaction data, utilizing tagging from patrons is a more engaging and possibly less invasive manner of gauging user perceptions. Tagging within LibraryThing for Libraries ([librarything.com](http://librarything.com)) can help with patrons find similar books and hopefully increase their enjoyment of the library. (Boter & Wedel, 2005)

One of the weaknesses of tagging is the lack of consistency within tags. The inconsistencies range from misspelling (e.g. cozy vs. cosy), to the fact that singular and plural versions of words are not recognized as the same entity (e.g. dog vs. dogs), and synonyms are

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not linked together (computer, pc, desktop). LibraryThing for Libraries solves part of this problem by providing a list of tags for books that can be added.

It is also not the wild west of cataloging/indexing with users running around applying random tags to everything they see. Yi and Chan (2009) compared LCSH to user tags applied to links on Delicious and found that two-thirds of the tags matched with LC subject headings and an additional 10 percent of user tags have a potential match to LCSH headings. When Spiteri (2007) compared user tags applied to National Information Standard Guidelines (NISO) her results indicated that the tags from the sites she used “The tags examined from the three folksonomy sites correspond closely to a number of the NISO guidelines pertaining to the structure of terms, namely in the types of concepts expressed by the tags, the predominance of single tags, the predominance of nouns, the use of recognized spelling, and the use of primarily alphabetic characters.” (Spiteri, 2007)

While tagging does not have a control for correcting and labeling items, that does not mean it is without benefit. Tagging can be more user friendly for patrons, Yi and Chan (2009) noted that the term “ajax” is used to refer to “Asynchronous JavaScript and XML”, while in LC headings Ajax refers to the Greek warrior. The majority of users are not going to come in asking for ‘Asynchronous JavaScript and XML’. They will use the more popular names. Tagging allows catalogs to keep up with current trends, which makes searching easier for patrons.

### **Conclusion**

Integrating tagging and social bookmarking within the public library sphere is not advocating for the replacement of cataloging systems that are already used, but as a supplemental service that the library can offer the community. Tagging allows libraries a way to offer more entry points to



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materials, and greater access to materials that the library has to provide. (Steele, 2009) Moving libraries to only a folksonomy based cataloging system is impractical in terms of labor and prohibitive in terms of cost. User tagging and social bookmarking can add another dimension of organization to the public library. Tagging adds additional value to the cataloging systems that already exists. (Terdiman, 2005)

Incorporating folksonomy and user tags helps create a more dynamic experience for the library patron. It increases information available in the online catalog. User tagging can foster a sense of inclusion through tags that represent patrons, the lack of which may be keeping some users away from the library. Programs help encourage the discovery of new works, and increase the library's availability outside of the physical library location, which allows the library to reflect the information needs of their patrons. These reasons can only make the library more relevant and helpful in the patron's life.

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