

Current Research & Trends: Folksonomies

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15 March 2010

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Metadata is critical for describing an item so that users can find it. In a brick and mortar library, the rules for describing materials are often determined by AACR, MARC, and/or the Dewey Decimal System. Starting around 2004, folksonomies began to appear in the digital environment, evolving out of a classification need for items on unique websites since traditional taxonomies did not cleanly apply to this new medium.

A folksonomy is a user-driven classification system. Users tag – or assign meaningful keywords, category names, or other metadata without set guidelines (Guy 2006) – items such as images, music, documents in digital libraries, utilities, and programs. This allows for users to gain some control over the objects' findability since they do not need to sift through a pile of search terms to find the item for which they are looking. Compared to an often unwieldy, rigid and ill-fitting controlled vocabulary, tagging often acts as a starting point for items that were never assigned a formal taxonomy.

Folksonomies allow for reduced set-up time due to not dealing with a formal taxonomy or classification system (Porter, 2005). A controlled vocabulary takes a team of catalogers and content specialists to define a very organized and contained terminology. It is also not easily modified without all parties agreeing on the addition or subtraction. Depending on the scope and breadth of the project, organizing a controlled vocabulary may consume a large amount of time and money. With the World Wide Web, content is created in vast quantities, and a controlled vocabulary is quickly rendered obsolete. However, a folksonomy responds to changes within its environment. It is scalable, flexible, and responds to users' demands and social backgrounds (Quinterelli, 2005). A

tagging-based system aggregates the information provided by the users, and provides meaningful relevance to them and the site.

There are two types of recognized folksonomies, broad or narrow. A broad folksonomy utilizes many people tagging the same item. This can be found in systems such as Del.icio.us, a social bookmarking site that utilizes the tags for the immediate user and then to categorize the link across the entire system, or Technorati, an tagged index of blogs. This tends to create a “Long Tail” effect, with users agreeing on many of the tags (which creates a spike on the beginning of the graph), and then the least popular trail off due to their singular uses. A narrow folksonomy is visible in a system such as Flickr or on personal blogs. One user (or a small) creates the tags for his personal use. This can often be viewed as a tag cloud on the side of a blog. This difference becomes important because a broad folksonomy considers the information from all users of a system, whereas a narrow folksonomy considers the information from one person. For example, a photographer may tag a photograph for his collection as a “flower” or “black-eyed Susan”, but a group of botanists may tag the same photograph with its formal name, “Rudbeckia hirta,” in a broad folksonomy. The tags are meaningful to the users in both folksonomies, but it is customized to the population.

Although folksonomies provide flexibility for assigning metadata to items in a rapidly changing environment, they are not without their weaknesses. Often, users provide synonyms (ex. bee and yellow jacket) and homonyms (ex. aisle and isle) for the tags. Other problems include misspelling, plurals, various levels of specificity, gibberish words, and ambiguous tags that are meaningful to only their creator. Mathes (2005) argues that categorization is occurring through tagging, rather than classification. He

contends that categorization places similar items in groups formed by loose relationships whereas a classification holds a systematic arrangement of the materials. Folksonomies are a flat system and do not provide clearly defined relationships among the tags.

There are a number of possibilities for improving the usefulness of folksonomies. The first is user training, which could be provided on a site by an administrator (in the case of a small group) or as a FAQ for a larger site or community. Another item that is currently implemented in many sites and in the Firefox browser bookmarks is suggested tags created from the title of the document or object. For example, for a page about the care of cats, it would suggest "Cat" instead of "Kitty." In this way, the tagging system provides feedback to the user, helping them tag with the common terms instead of the obscure words that may form a long tail. Since spelling is often a problem, a spell check program upon submission could suggest the correct version of the word.

RESOURCES

- Aharony, A. (2009). *Librarians and Information Scientists in the Blogosphere: An Exploratory Analysis*. *Library & Information Science Research*, 31(3), 174-181.
- Cattuto, C., et. al. (2008). *Emergent Community Structure In Social Tagging Systems*. *Advances in Complex Systems*, 11(4), 597-608.
- Dye, J. (2006). *Folksonomy: A Game of High-tech (and High Stakes) Tag*. *Econtent*, 29(3), 38-44.
- Guy, M., and Tonkin, E. (2006, January). *Folksonomies: Tidying up Tags?* *D-Lib Magazine*, 12(1). Retrieved 12 March 2010 from <http://www.dlib.org/dlib/january06/guy/01guy.html>
- Lee, C. S., et. al. (2009). *Tagging, Sharing and the Influence of Personal Experience*. *Journal of Digital Information*, 10(1), 4.
- Mathes, A. (2004). *Foksonomies – Cooperative Classification and Communication Through Shared Metadata*. Retrieved 12 March 2010 from <http://www.adammathes.com/academic/computer-mediated-communication/folksonomies.html>
- Matusiak, K. K. (2006). *Towards User-Centered Indexing in Digital Image Collections*. *OCLC Systems & Services*, 22(4), 283-298.
- Porter, J. (2005). *Folksonomies: A User-Driven Approach to Organizing Content*. *User Interface Engineering*. Retrieved March 12, 2010 from <http://www.uie.com/articles/folksonomies/>
- Quintarelli, E. (2005, June). *Folksonomies: Power to the People*. Paper presented at ISKO Italy-UniMIB Meeting, Milan, Italy. Retrieved March 12, 2010 from <http://www.iskoi.org/doc/folksonomies.htm>
- Trant, J. (2009). *Studying Social Tagging and Folksonomy: A Review and Framework*. *Journal of Digital Information*, 10(1), 4.
- Yi, K., and Chan L. M. (2009). *Linking Folksonomy to Library of Congress Subject Headings: an Exploratory Study*. *Journal of Documentation*, 65 (6), 872-900.