



## intranet librarian

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# Intranet Applications for Tagging and Folksonomies

An explosion of metadata, created by users of social software applications in the past year, suggests that it's definitely time to take a careful look at how to harness the power of tagging and folksonomies inside the firewall. Tags and resources in social software tools are intended to be shared with everyone to help discover new resources, which is in line with intranet goals. It's time for intranet Webmasters to consider rolling out some testbed applications.

All the buzz about tagging in the media and on Weblogs is enough to make any experienced intranet Webmaster feel wary but excited. It reminds me of the Gartner hype cycle, where new technologies are announced and hyped in the press until they reach the status of "superheroes" that will save all of mankind. If we hop on the bandwagon too early, we risk riding the hype wave and falling into the trough of despair. On the other hand, we don't want to sit on the sidelines, failing to innovate. We should strive to make the best use of new technologies coming down the pipe.

### TAGGING AS A SOCIAL PHENOMENON

Because folksonomies are not taxonomies, they lack many of the latter's strengths and benefits. Lou Rosenfeld [[http://louisrosenfeld.com/home/bloug\\_archive/000330.html](http://louisrosenfeld.com/home/bloug_archive/000330.html)] states: "Folksonomies ... don't support searching and other types of browsing nearly as well as tags from controlled vocabularies applied by professionals." Liz Lawley [[http://many.corante.com/archives/2005/01/20/social\\_consequences\\_of\\_social\\_tagging.php](http://many.corante.com/archives/2005/01/20/social_consequences_of_social_tagging.php)] simply calls it "lowest-common-denominator-classification." I won't attempt to catalog all the weaknesses of folksonomies; I'd rather highlight a few. Folksonomies are flat and unstructured. Tags are messy. They lack precision and have no ability to control synonyms or related terms. Is it bunny, bunnies, rabbit, Easter, or a proper name? Lots of other variants come to mind: plural, singular, spelling errors, and typos. Different social software tools take different approaches to tags composed of multiple words resulting in even more variations. Is it "San Francisco" or `san_francisco` or `SanFrancisco`?

Folksonomies have many strengths—if they didn't, that buzz about them wouldn't exist in the media and on blogs. First of all, lots of people are willing to add tags. They even enjoy tagging, perhaps due to its social dimension. Metadata is fun! Imagine that! Individuals can see clear benefits in applying tags. The feedback from the social community helps reinforce and encourage more tagging. In contrast, efforts to have content creators apply structured metadata schemes to enhance knowledge sharing have often met resistance. The cognitive overhead of learning and applying a structured taxonomy must be borne by the individual so the group can reap the benefit. Large enterprises can easily have taxonomies or controlled vocabularies with a thousand or more terms. As your taxonomy grows and expands, it takes more time to select terms and to learn the system.

Rashmi Sinha [[www.rashmisinha.com/archives/05\\_09/tagging-cognitive.html](http://www.rashmisinha.com/archives/05_09/tagging-cognitive.html)] states that "the beauty of tagging is that it taps into an existing cognitive process without adding ... much cognitive cost." Tagging takes away the decision-making process of choosing the right category that can lead to a state of analysis-paralysis. You can



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simply jot down associated concepts without wondering whether you have categorized the item in the correct bucket.

Applying structured taxonomies for collaborative knowledge sharing systems is frustrating because some items don't fit. This could be because the concept or product is so new that no terms have been added to the taxonomy yet or that the object in question doesn't fall neatly into a category. In comparison, folksonomies are nimble and flexible. They can change quickly. You can add new terms at will, and there's no need to jump through several hoops to get new terms added or approved.

### INTRANET APPLICATIONS OF FOLKSONOMIES

As an intranet Webmaster, you may be thinking, "So what if people like to tag? They like to play video games too." The real question is: What are the benefits of tagging for the enterprise? Can tagging help findability? The jury is still out on findability, but tagging certainly helps discoverability. It also helps with personal knowledge management. Individuals find tagging useful for keeping track of things they have found so they can find them again. Tags also help with the discovery of new resources, as the hive mind uncovers and reveals new sources in topical areas that they choose to monitor. Discovering experts in a particular area is another application.

Are there initiatives underway in your own intranet and workplace to create expertise finders and enhance corporate directories? Are your colleagues struggling to keep up with what's new in their areas and individually wading through a glut of new sites and resources? How easy is it for employees to find things once on your intranet, and how easy is it for them to find things there again a few days later? What kinds of tools do you provide to employees to help them collect and organize interesting sites and resources they discover and then share those resources with others?

Tim Bray [www.blogger.com/post-create.g?blogID=1284406] posed questions about tagging on his blog, Ongoing, that strike right at the heart of the matter: "Are tags useful? Are there any questions you want to ask, or jobs you want to do, where tags are part of the solution, and clearly work better than old-fashioned search?"

Without a doubt, tags are useful for objects that have no other metadata—photos, music, videos, schematics, diagrams, slides, charts, and graphs. We can benefit from tagging anything without words. For public libraries this might

mean a collection of local history photographs that aren't labeled at all. For intranets it might mean digital objects we can't find or share very easily.

Tags can also provide an overview of topics that are currently of interest to many people at a given moment. Tag clouds, a visual representation of the tags that have been applied to objects, provide a weighted view of tags. The larger the term in the tag cloud, the more frequently it has been used. A quick visual scan of a tag cloud lets you spot daily trends or trends over time.

### LEARNING FROM OTHERS

Intranet Webmasters can test-drive many of the social software sites that support tagging. What works on the Internet with an audience of billions of users may not translate to an intranet environment. Fortunately, there are a couple of public enterprisewide projects where we can peer over their shoulders. The Pennsylvania State University Library has rolled out a social bookmarking service called Penn Tags [http://tags.library.upenn.edu/] for its community. Anyone can browse the items in the database, but only community members can add entries. The Berkman Center for Internet & Society at Harvard Law School launched a social bookmarking site called H2O Playlist [http://h2obeta.law.harvard.edu/].

In the corporate world, IBM is developing an enterprisewide social bookmarking application called "dogear." According to the IBM Think Research home page [www.research.ibm.com/thinkresearch], "Large companies often miss opportunities because they fail to understand that success depends less on reporting structure and more on informal Webs of contacts. IBM Research is promoting an approach called social network analysis to reveal these hidden connections that drive how work gets done."

IBM already has a robust internal taxonomy and plans to augment that with folksonomies [http://iasummit.org/2005/finalpapers/106\_Presentation.ppt]. It's not a case of a folksonomy replacing a taxonomy. IBM thinks that dogear has the potential to help reveal the interests and expertise of co-workers in order to solve real-world problems. dogear can also help foster communities of practice and increase communication.

IBM's key design decisions when developing dogear include the following:

- For posting new entries, use real names instead of pseudonyms to help find people with similar interests and experts.
- Allow anyone to browse or search anonymously to spread adoption.
- Create systems that support permission levels so that sensitive bookmark collections can be limited to specific individuals or a group.
- Support private bookmarks for personal use so individuals are not forced to use two systems.
- Consider scoping tags and bookmarks based on workplace roles to allow scoping of content and remixing.
- Set up notification systems like RSS and e-mail subscriptions so that subscribers can keep up with new resources.

All time most popular tags

05 amsterdam animal animals architecture art august australia autumn baby barcelona  
beach berlin birthday black blackandwhite blue boston building bw california  
cameraphone camping canada canon car cat cats chicago china christmas  
church city clouds color concert day dc december dog dogs england europe fall family  
festival florida flower flowers food france friends fun garden geotagged germany  
girl graffiti green halloween hawaii hiking holiday home honeymoon hongkong house india  
ireland italy january japan july june kids lake landscape light london losangeles macro me  
mexico moblog mountains museum music nature new newyork newyorkcity newzealand  
night november nyc ocean october paris park party people photo portrait red river

Tags on a Flickr site show their relative popularity by size of typeface.

- Build recommender systems that suggest other bookmark collections or resources that might interest you.
- Design the tagging tool to allow for easy remixing and data mining of content

The ability to remix content from the social bookmarking tools opens the doors to re-using this information in the enterprise search results. Lists of tagged resources or tag clouds could be remixed and added to team- or role-based pages on your intranet. Tag information could also be embedded in the corporate phone book and directory, providing insights into an individual's expertise.

### TAGGING IN THE DIGITAL LIBRARY

At Lucent, Michael Angeles uses bookmarking tools to meet the needs of digital library users. The company needs a way to clip and save useful articles. It also wants a simple way to republish links to the articles on the corporate portal. Many social bookmarking applications have built-in tools built in that create RSS feeds by topic or bookmark account. Republishing these requires stepping through a process of setting up tools to convert RSS to HTML. Learning to step through this process was a barrier for digital library users. They wanted to drive the car, not tune the engine. Angeles worked with a programmer to develop an easier system for these users to repost content. Now they simply cut and paste a custom JavaScript code dynamically created for each tag or category into a Web page in the spot where they want the headlines to appear [<http://urlgreyhot.com/personal/node/2463>].

Tags don't need to be added at the time the document is created or even by the creator. Tags could be created by many people in ways that are meaningful to them at any time. Shel Holtz [[http://blog.holtz.com/index.php/Weblog/folksonomies\\_on\\_intranets](http://blog.holtz.com/index.php/Weblog/folksonomies_on_intranets)] thinks that tagging has great potential for intranets in overcoming the "wide gap between how employees *think* about information and the way the owners of the information classify it." What if all your employees could tag pages on the intranet as well as Internet sites, digital library objects, etc.? Take a look at the BBC Backstage [<http://bbctags.headshift.com/>], which shows a working prototype of the BBC site that allows visitors to tag articles.

What if you could build, mine, and repackage tags from your social bookmarking tool and dynamically show tags for each intranet page? What if your library catalog could display tags as well? Would a book tag cloud mined from links that people make to Amazon and the library catalog be a useful addition to the library Web site? Would showing a small tag cloud of terms in the vernacular of your Web site visitors help others discover related content?

### FOLKSONOMY TESTBED PROJECTS

Several factors contribute to the success or failure of any new intranet service. Carefully assess the potential audience and the need for this new service. Are you solving a real problem that people have, like Michael Angeles did? How ready is your organization to embrace new ideas and try new tools?



The tags visitors have added to a particular BBC article

Are they reluctant or eager? Do you have a culture that supports and rewards sharing knowledge?

Scale impacts the success of a "social" software project. No one has identified the number of people needed to reach critical mass for an enterprisewide initiative. However, don't assume that if you have a small workplace, tagging is impossible. You can start small and support the needs of one team or group that need to collaborate and share resources. If you want to roll out a large enterprise initiative, one way to achieve that scale might be to discover how many people are tagging content already that you can harvest. Are employees writing Weblogs and assigning categories? Do they use social bookmark tools that publish RSS feeds that you could remix? Take a look at some of the free bookmark tools that you can install locally that could be adapted for internal use like Scuttle [[www.scuttle.com](http://www.scuttle.com)], Nature Publishing Group's Connotea [[www.connotea.org](http://www.connotea.org)] and Unalog [[unalog.com](http://unalog.com)].

### FUTURE DIRECTIONS

Folksonomies and tagging are in their infancies. New features are constantly popping up. This is the time of experimentation and rapid development. For example, some social bookmarking tools have started to suggest tags that you might use based on tags already assigned to this resource. Whether this is a positive feature or not depends on your point of view.

Several people have speculated about how combining folksonomies and structured taxonomies might help improve findability. Consider mapping a keyword search on the intranet against tagged resources for that term, full-text search results, and controlled vocabularies. Are there some interesting new ways to combine and cluster results? Often there is a chasm as wide as the Grand Canyon between the user's vernacular and the controlled terms in library records or the intranet taxonomy. Tagging and folksonomy usage could bridge that gap.

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