



HFI User Experience Design Newsletter

Sharing "Discoverability" Through Better Tag Strategies

Message from the CEO, Dr. Eric Schaffer

December, 2011

[Newsletter](#)



Human Factors
International

HFI User Experience Design Newsletter

December, 2011

Table of Contents

Sharing "Discoverability" Through Better Tag Strategies by John Sorflaten, PhD, CPE, CUA, HFI Writer	3
Message from the CEO, Dr. Eric Schaffer by Eric Schaffer, PhD, CPE, CUA, Founder and CEO	9

Sharing “Discoverability” Through Better Tag Strategies



Let’s explore a recent job requirement for usability folks that may affect you.

From Flickr.com (seeking Sr. Product Manager):

Build a strategy and product requirements for Flickr features focused on the **core photo sharing experience**. Partner with user experience team on projects to improve site-wide usability and **discoverability**.

The usability job skill (“**discoverability**”) in this job description involved *finding* stuff—pictures. In other venues, stuff could be music, books, restaurants, movies, food, clothing—or even a document from your organization’s intranet.

So, are you supporting your user’s need to find the right stuff when they enter their search criteria? This involves “tagging”—our topic for this newsletter.

But the *other job skill (sharing experience)* involves user *experience*, or, as HFI calls it, PET (Persuasion, Emotion, Trust) approach.

Now, let’s examine how you can guide your organization in both of these goals: **discoverability** of just the right product or service—but **taking into account the PET motivation derived from the social sharing experience (also known in PET terms as “social proof”)**.

We’ll report on a 2010 study from seven European researchers affiliated with the L3S Research Center. They aimed to extract additional benefit from the “tagging” efforts by end-users.

As you know, tagging provides social web benefits through “crowd sourcing” efforts in identifying stuff others may want to know about. Delicious.com and other page tagging sites collect tags from folks—the “common person”. This means everybody helps create a “catalog” of sites, all indexed by a “taxonomy” of common, descriptive words.

Web savants call the results of such tagging a “folksonomy”. The resulting taxonomy from the tagging helps folks find what they want using the language given by the masses.

How can you insure your end-users (“folks”) use the best tagging practice for objects, concepts, pictures, or documents? That’s what we’ll learn, next.

How to get better tags from our end-users with minimal extra work

Our researchers created a special add-on to the photo share site Flickr.com as a test vehicle for their ideas. They called it *TagMe! The Next Generation of Tagging!*.

Here’s their home page. Check out their marketing appeals: “Categorize your assignments so that you can disambiguate them.” (The word “disambiguate” clearly labels this site as a research site, not a commercial site!)

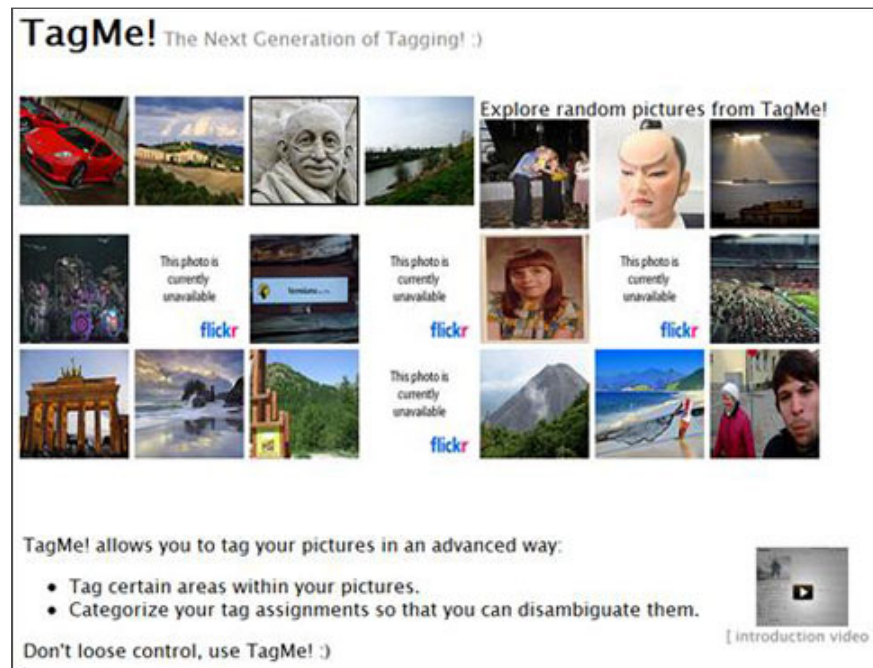


Figure 1. Test site based on Flickr. It allows participants to add tags and categories reflecting the experimental protocol described below.

This study asked participants to tag photos provided in the web site both in the normal way and in a new, more automated manner. Let’s see how that works...

HFI User Experience Design Newsletter

1. When looking at the picture you recently took of the Sydney Opera house in Australia, you expect to tag it.
2. So you enter your tag in the “tag” field. You might enter “Sydney Opera House”

At this point, let us consider what a tag does for you.

Remember “keywords”? That’s how we “search”. We enter keywords that BEST describe our topic.

If you ever wanted this picture, what would you type? Of course “Sydney Opera House”.

Or you could type “Sydney”. Or you could type “Opera” or “House”.

You get the point. There is some variability here in typing your search terms.


How can we improve on the odds of finding your picture again? We need a “collection” of good words!

So, that’s what a tag does for you. You (and hundreds of other folks) have just entered one or more useful keywords. **Tags make “discoverability” of content easier for your community of users.**

Let’s continue...

3. Now, after entering your tag, **our L3S researchers offered a NEW function: the “category”**. Go ahead, follow the instructions given below in Figure 2. How would you categorize your tag? In this case, you might enter “architecture”. This word is an umbrella term of which “Sydney Opera House” is a sub-classification.



Tags: you haven't assigned any tags to this pic yet 

Add new tag:

Tag entire image	Tag specific area
tag:	<input type="text"/> [enter just one single tag you want to assign]
categories:	<input type="text"/> [optional: classify your tag assignment, e.g. <i>people, content, sport</i> – learn more]
<input type="button" value="cancel"/> <input type="button" value="save"/>	

Figure 2: What participants saw when entering their tags. The addition of “categories” resulted in additional concepts that provided greater “discoverability” of what the end-user wanted in subsequent searches for photos.

4. Wait, what have you just done? That instruction felt pretty good: it was reasonable, and not too hard. But unknown to you, you get a good benefit: you have added one more *excellent* keyword!
5. Furthermore, the **authors experimental web site also provided “auto-completion” for both tag and category entries.** This important qualification indicates that participants benefited **by getting “prompts” to help standardize their new entries and increase tag and category consistency.**

- The authors applauded autocompletion options for category tagging: *“The vocabulary can be aligned much better if categories, which have been applied by other users, are provided as suggestions as well.”*

Let’s take a look at the research results.

For the 600 unique item tags (blue line) end users entered about 110 unique *categories* (brown line). *Fewer* unique categories implies that each category is more *inclusive* in the number of photos it describes.

Therefore, the use of categories helps cast a more inclusive net to help find the photos it describes. Then the normal “tag” becomes a sub-classification that narrows the search to a more precise conclusion.

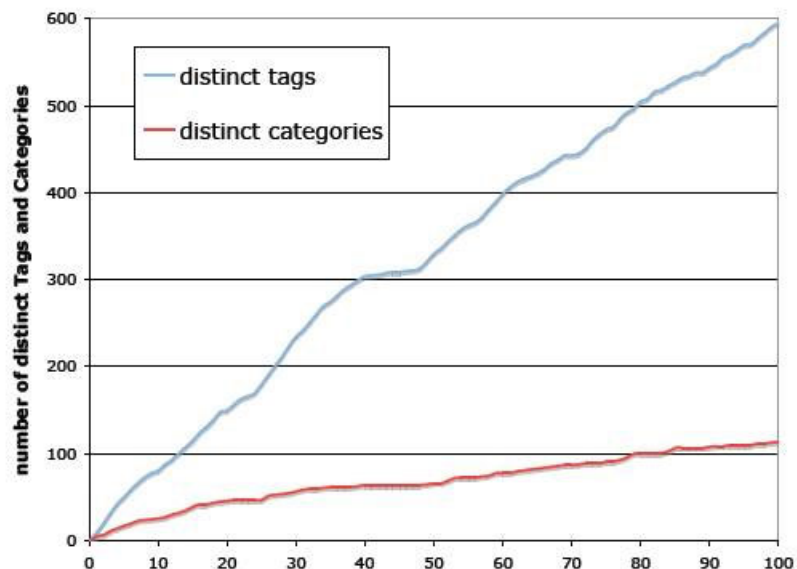


Figure 3: Comparison of tag diversity versus category diversity when invented and entered by end-users. Tags are about 5.4 times more diverse than categories. This means “categories” have less diversity and serve to “expand” the results of using that category name as a search term.

The authors indicate **“users seem to use different kinds of concepts for categories and tags respectively.”** Therefore, when a category is combined with regular tags, the “overlap” of criteria more capable of discovering the picture you want.

Recall that when you create a web page you can enter “keyword tags” in your HTML to aid search engines in characterizing that web page. Likewise, “tagging” in this new context aids subsequent searches. Having a regular tag **plus** a *category* tag supports greater discoverability.

Wrapping up "discoverability"

This research describes methods for capitalizing on user actions to increase “discoverability” of subsequent searches. Both tags and categories support the user PET *experience* of **community and sharing**.

These actions include not only “tagging” but adding functions like “categories”.

The semantic web is a new frontier. These are just a few examples of how we can leverage user tagging experiences and make them a powerful tool for discoverability.

References

Abel, F., Baldoni, M., Baroglio, C., Henze, N., Kawase, R., Krause, D., and Patti, V., 2010. Leveraging search and content exploration by exploiting context in folksonomy systems (Electronic Edition). *New Review of Hypermedia and Multimedia*, 16, 1 & 2, pages 33-70

Message from the CEO, Dr. Eric Schaffer



With the exponential mass of content stored on tiny terabyte devices, UX professionals will increasingly deal with the issue of discoverability. We might soon have full lifetime recordings. But imagine having to relive all the boring parts! You really need a way to find the interesting stuff.

So mechanisms of access are rightly a growing subspecialty in our field. And certainly, having more dimensions of specification allows you to narrow down the choices and find the interesting stuff—just like a faceted navigation (the left navigation bar with a bunch of filters) lets you quickly narrow down to the things you want.



Human Factors
International

410 West Lowe, P.O. Box 2020
Fairfield, IA 52556
Phone: 800.242.4480
Fax: 641.472.5412
hfi@humanfactors.com
www.humanfactors.com