Social Tagging Roles: Publishers, Evangelists, Leaders

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ABSTRACT
Social tagging systems provide users with the opportunity to employ tags in a communicative manner. To explore the use of tags for communication in these systems, we report results from 33 user interviews and employ the concept of social roles to describe audience-oriented tagging, including roles of community-seeker, community-builder, evangelist, publisher, and team-leader. These roles contribute to our understanding of the motivations and rationales behind social tagging in an international company, and suggest new features and services to support social software in the enterprise.

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Tagging, social software, social roles, community, audience

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H.5.3 [Information Interfaces and Presentation]: Group and Organization Interfaces

INTRODUCTION
Social tagging systems have emerged as a compelling technological framework in which to study the emergence of online communities. For example, social bookmarking systems inject sociality into information seeking by allowing users to search for resources via community browsing, such as looking for bookmarks according to popularity or those created by specific taggers [9]. Social tagging has also been implemented in systems that serve a more communicative role, such as photo sharing [1] and blogs, where communities may develop around common interests.

Previous research has examined the motivations behind why users tag and how tags are employed but the types of taggers and their associated characteristics have largely been unexamined. [7] describe organizational motivations, where tags are used to provide structure for resources and help with re-finding personal resources. Social motivations can be expressive of the tagger’s identity and are often linked to individually focused actions such as self-presentation and impression management [7]. Tag typology has also been studied with respect to whether or not tags are helpful in completing a task [12] or whether they fulfill a specific function such as information retrieval [4].

Much of this work is primarily inward-facing; that is, the individual tagger is the primary beneficiary. [1], however, observe external-facing social motivations in a photo-sharing application that play a communicative or organizational function for an audience, whether known or unknown. This suggests that there are taggers who may be contributing to systems for the greater good or to participate in a community. This motivation may be particularly strong in enterprise systems for social tagging (for review, see [9, 10]), where taggers may have working relationships with one another, and where exchanges and interactions take place within a known and relatively high-stakes organizational context.

To better understand the behavior and motivations of these types of taggers, we draw from studies of how social roles emerge in online communities. In an online community, social roles range from answer person [13]; trolls, local experts, conversationalists [5, 6]; experts, members, and novices [2]; leaders and lurkers or non-public participants [11]. The social role framework allows us to systematically observe and categorize the evolving strategies and motivations employed by taggers depending on whom they perceive their targets to be.

In this paper we present the results of a qualitative study of tagging behavior for users of tagging systems deployed in a large enterprise. We identify important social roles that surface when users tag for an audience of others and offer implications for the design of collaborative tagging systems.

METHODOLOGY
Semi-structured interviews were conducted with a sample of 33 individuals, stratified by their tagging activities across several enterprise systems available for internal use within a large corporation. The systems consisted of a blogging tool [10], an enhanced contact directory [10], a social bookmarking website [9, 10], and a podcast repository.
Each application supported the ability to collaboratively tag resources for subsequent use. Informants were distributed across 6 countries; 12 of the informants were female. Informants’ job roles included project managers, designers, software engineers, and consultants. Interviews consisted of a series of open-ended questions regarding the informants’ functions within the organization, the communities with which they identified and general discussion regarding their tagging activities. Finally, there were a series of specific probes asking informants to discuss specific tags that they had created in the different tagging systems. Coding for the interviews was influenced by grounded theory (e.g. [3]) in which emergent themes were generated from the collected data.

RESULTS

Five major social roles around the use of tags emerged from our interviews. Like [1, 9], we observed that individual motivations, such as creating a personal repository or re-finding one’s own resources, remained important. At the same time, however, the informants who fall within the following audience-facing roles place equal or higher importance on tagging for others.

Community-seeker

As mentioned earlier, the corporation studied is distributed, with employees across the globe. Sixteen informants reported that they used these systems as a way to find members of existing communities by searching for tags that described their interests, or by using those tags to enter into collaboration with the community members. The community-seeker is especially concerned with using tags to articulate social connections to others in the group in multiple tagging systems:

[tagging is] ... about keeping track of what other people are thinking ...if I can find someone who's interested in this and we can talk about it and just... work on a project or talk about projects. (B)

Community-builder

If such a community did not exist, some informants would appropriate the tagging features of the system as a way to create one. The intended readers for the tags created by the community-builder role are current and potential members of the community. The community-builder tailors their tag choice appropriately so that the intended recipients can more easily find available resources. Specific topical tags are then chosen so that a community will rally around the described interest:

I'm happy to accept [a tag that] someone else has used because that makes me more useful to me and the other person. (E)

The community builder is highly aware of how other members of the group view their tags, especially when they are so explicitly linked to his/her professional identity.

Ok, because someone went out on the internet and typed out a search, this tells me that project-management... [is] the highest percent of [search] terms ... This is how people are finding me.... (J)

This behavior is consistent with [2]’s assertion that visibility is part of active membership within a community and is a critical aspect of career self-management within a community of practice [8].

Evangelist

We observed several instances of community builders who developed increasingly complex strategies and motivations. Using the language of this corporation, we term this role as an evangelist, who can be described as a core connector between those with similar interests within the organization. The evangelist not only uses the different systems to broadcast his/her message but also serves the community by finding related information to facilitate sensemaking for fellow members of the group. Here an evangelist, who was “able to build a community of people around [my] blog,” describes a tagging strategy:

When you go into [the social bookmarking site] and look at those people, you see that they match, they use the same criteria as myself and the tagging convention. It helps because it provides a unifying message...that whatever they see in other systems is what they'll see...(L)

The evangelist tags within different systems to draw attention to his or her resources and content. It is important to note that the audience consists of known members of the community, with known information-seeking strategies:

I know that several people subscribe² to me on attention. I know that several people look up my bookmarks on attention. For a while, I used to use attention-management but now I make sure to use attention now because I know how they find me. ($, referring to the social bookmarking site)

The evangelist is often concerned with raising the profile of her/his community and uses tagging as part of a strategy to enhance the reputation of the group. For example, in the following quotation, the informant keeps track of his community’s visibility in the organization by increased usage of tags within the social tagging system.

I want to see project-management move up that cloud. I want to tap into it. It requires a lot more than me doing it. My whole community of project managers would have to get involved. (J, referring to the blogging tool)

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1 For clarity, we have used bold for actual tag names.
2 This respondent refers to a feature that provides RSS feeds based on tagger, tag, or the intersection of tagger and tag in the social bookmarking site. The list of subscribers is visible to the tagger.
Publisher
Within the organization, there are those whose job function includes the production and dissemination of content to a variety of targets. Nine informants were categorized within this role, which we term as a publisher. Although the publisher may target particular recipients (e.g., salespeople, consultants), they are not explicitly community building but instead are providing information to the large audience they serve.

How do I get people to stumble across it? It's applicable for sales people. If you're webspHERE, it's a marketing presentation. And then the specific topic [tag] is "enabling-business-flexibility." (V, referring to the podcast repository)

Like the community builder and the evangelist, the publisher is concerned with gaining visibility for resources intended for an audience. However, they are more concerned with increasing traffic from a largely undifferentiated target group (i.e. consultants, salespeople) as opposed to becoming a known member of a community or creating social connections between people with shared interests.

Certainly, we want to increase the visibility of our site so the Software Group development community...I'm trying to get our articles in front of as many eyeballs as possible and that's [tagging] just another way to do it. (T, referring to the social bookmarking system)

Because publishers are also driven to share their content with as many people as possible, they are interested in enabling their audience with tags that will assist them with their search for relevant information. As a result, tags are chosen because they are perceived as search terms that might draw the highest amount of traffic possible.

And going okay, php...I know that's a tag that's going to stick out to people. That's certainly a hot topic. (U, referring to the blogging system)

Unlike the community builderseeker, publishers are largely broadcasters. The audience may be targeted but publishers do not consider themselves to be part of the community who are the intended recipients of the disseminated content.

Small Team Leader
The small team leader employs tags as a signaling device by employing terminology that is understood primarily by in-group members. In our interviews, we observed that six of our informants identified with this role. While the community builderseeker, evangelist and publisher were active taggers across systems, the small team leader’s tagging was more variable. There were a few reasons expressed for their lower frequency of tagging, most often that other members of the team did not write tags within the systems.

It's kind of like going to a party. It's going to be fine if a lot of people go, but there isn't really the mass that we need to make it part of the mainstream. If that mass evolves, then I'll gravitate. (I, referring to the social bookmarking site)

When the small team leader is a more active tagger, he or she may attempt to use the systems as a way to share resources with the team as the intended target. The tags chosen are ones that have meaning to only those within the team (e.g. project names). In the following quotation, the informant describes a tag that consists of an acronym for a project (EGL) combined with one standing for user architecture (UA).

That EGL_UA tag is one that I specifically picked ... as something my team... would use on [the social bookmarking site]. I remember sending out an e-mail that said, "I'm going to start using this to record links to these pages we keep having trouble finding. And I'm going to apply this EGL_UA tag to it so if you find links, you can do the same." (K)

In these cases, the small team leader has tried to establish team-specific tags but the rest of the group does not respond (e.g., EGL_UA was intended for team use, but was in fact written by only one member of the team). We speculate that small teams may not employ tagging as frequently because of the smaller number of group members and the higher levels of existing common ground among them.

Looking for consistency
The desire for tag consistency emerged as a major point of overlap between the audience-facing roles that we observed. Informants attempted to create tags that were internally consistent with tags that they had used previously. Motivations for this were both individual (e.g. re-finding personal resources) and social (e.g., “how will others find my content if I don’t use the same tags over and over?”).

Well, yes there is consistency overall. This crosses here [the blog] and in [the social bookmarking system]. There are tags that I use a lot, like XXX, services, the way I use them, I keep consistent. ... the tags that I use most. (A)

Despite their best efforts though, informants were unsure of whether they did indeed choose the same tags intentionally over a period of time.

Consistency with other taggers was also a concern among our informants. Besides attempting to anticipate how others would search for information, they appropriated the tag suggestion features of these systems to select tags that had been used more often by others. In addition, informants expressed reluctance to create a mismatch between suggested tags and the ones that they may have had in mind originally.

Because I don't have a personal categorization for a particular ... I'm happy to accept what someone else has used because that makes me more useful to me and
the other person. And then ... when I do that, I start thinking about the content of that page in terms of tags that other people have already used. (G, referring to the social bookmarking site)

IMPLICATIONS FOR SOCIAL TAGGING SYSTEMS
From our interviews, we delineated a set of emergent social roles suggestive of a pattern of tagging behaviors that were motivated by the formation of community, the awareness of one’s audience and a perceived need to communicate with a small group. We now suggest a number of design implications for social tagging systems based on our data.

First, we observed that the informants were generally aware of their individual tags as part of a larger collection viewed by an audience of some kind. One strategy employed by informants was to attempt to remain consistent within their own tag usage within and across systems. Current visualizations of one’s tags and the body of tags within a system, such as tag clouds, are inadequate in meeting this need and in fact, were rarely mentioned by informants as a tool for managing their tag vocabulary. Users need to be able to see the tags they have used in all systems, and to be able to apply each of those tags easily within the current system of interest.

Our analysis extends the categories of [1] by showing that the distinction between audience and community was a key factor in creating the distinction between the social roles that emerged. While the community builder and the evangelist used tagging to manage group membership, the publisher employed tagging as a broadcasting mechanism. Currently, there is little support, besides referral tools or lists of subscribers, to help users in these roles to gauge their success in drawing attention to their resources. The difference in target recipients (e.g. community or audience), however, suggests that distinctive tools to track visitor behavior are needed to distinguish between the two.

Our results also suggest opportunities for higher-quality tag recommendations, responsive to the users’ social role. This could be accomplished during both tag selection and tag-based search. For a community member, the post form could recommend tags that have been used by other people in that community. Similarly, when searching via tags, a team leader could receive recommendations from other members of that group.

CONCLUSION & FUTURE WORK
Observing the social roles emergent in tagging systems is a distinct yet complementary approach to previous analyses that focused on motivation and vocabulary development [1, 4, 7, 10, 12]. By focusing on how different user groups interact with each other, researchers and designers may be able to better understand how tagging systems are taken up socially. Besides further clarifying the why and how of tagging behaviors, social roles can also uncover underlying network structures within distributed online communities that form around tagged resources [13]. Additional study through social network analysis may reveal on a larger scale the systematic behaviors of each role. Lastly, our observations suggest that tagging may be part of larger overall strategies that can explain the motivations of social software users in general, such as for impression management [8] or as a broadcast medium.

REFERENCES