

User Motives for Tagging Video Content

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Abstract. User tagging of video content provides many possibilities for indexing and personalization. To exploit these possibilities, users must be willing to tag the video content they watch. In this paper we present the first results of our ongoing research, by constructing an overview of user motives to tag video content. We present the results of a study in which we elicited possible user motives to tag movies on the internet. The identified motives include the categories ‘indexing’, ‘socializing’ and ‘communicating’. Finally, user barriers to tag video content are discussed.

1 Introduction

Tagging, or “labeling objects with free-style descriptors” [1] is a user-generated means of enriching the indexing of information. Consequently, it enables users to find information in large content collections more easily [2], or to organize their own information. Besides the benefits for indexing purposes, tagging can also be a valuable source of information for personalized information systems that offer tailored output to a user or a group of users. More specifically, tags can inform a system about user characteristics and attitudes [3], and the resulting user model can be used as input for personalized search or recommendations [4].

However, in order to reap the benefits of tagging, users must be willing to provide a resource¹ within a system with tags. They must be motivated to invest time and effort in thinking of and submitting these labels. This paper discusses the ongoing research into users’ motives to tag video content. In section 2, we will first discuss user incentives to tag in general, as can be found in the literature. Section 3 and 4 consecutively discuss the set-up and results of the first stage of our research: eliciting user motives to tag video content, using focus groups. We conclude this paper with a preview of future work which elaborates on the identified motives.

¹ The term ‘resource’ is introduced to denote any type of content items, such as video clips, pictures, articles, and so on.

2 User Incentives to Tag

Several reports have discussed user incentives to tag. Marlow et al. [5] for example, listed the following:

1. *Future retrieval*. Tagging to make re-finding a resource easier.
2. *Contribution and sharing*. Tagging to contribute to a resource.
3. *Attract attention*. Tagging to bring a resource under attention of others.
4. *Play and competition*. Tagging as a form of gaming.
5. *Self presentation*. Tagging to express the individual identity.
6. *Opinion expression*. Tagging to present a personal opinion.

These incentives remain generic since they cover multiple types of resources a user can tag (e.g., photos, movies, text). It is possible that the user incentives to tag differ per modality, and within a modality perhaps even per system. In order to formulate design guidelines for tagging applications, it might therefore be better to focus on one modality only.

An example of such a study can be found in Ames and Naaman [6] who identified user incentives to tag photos. They found four categories of stimuli that make users tag, which partly overlapped and partly differed from the incentives Marlow et al. identified. The results of such a study are very valuable for system designers. By taking modality-specific incentives and their importance into account, they can design systems that tempt users to tag. Consequently, the opportunities for improved indexing and for user modeling, based on tags, and tailoring output are increased.

We wanted to generate a modality-specific overview of incentives to tag video content. Therefore, we first needed to elicit people's motives to do so. We see motives as possible incentives for people to tag. The first, explorative stage of our research was concerned with the *making an inventory* of people's motives to tag video content. These can serve as input for our second stage in which we want to *rank the importance* of these motives for different systems that provide the possibility to tag video content.

3 Study Setup

We conducted two focus groups, each with a distinct set of participants: young (5 participants, aged 18 to 23) and middle-aged (6 participants, aged 34 to 57) internet users. After discussing their experiences with tagging and their self-reported digital skills, we showed the participants four systems in which one could tag video content.

1. Youtube. A platform offering all kinds of videos to a general audience.
2. Hyves. A Dutch social network site that features uploading and sharing videos with a specific audience (family or friends, or alternatively, the whole world).
3. Skoeps. A Dutch news website offering news videos to a general audience.
4. 3voor12. A Dutch online music community offering music videos to a general audience.

These systems represent the plurality of video platforms available on the internet, as categorized by Sen et al. [7]. After an explanation of each system, we asked the participants why they would tag when either viewing or submitting video content.

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Except for one, all young internet users had experience with tagging. They were daily internet users, who all believed they possessed the necessary skills required for tagging. They also had experience with web 2.0 systems like Wikipedia, Amazon, and in two cases, Flickr. In the case of the middle-aged internet users, except for one, no one had experience with tagging. All of them were frequent or daily internet users, who all believed they had the required skills to tag. Finally, their experience with web 2.0 systems was mixed.

The two focus groups resulted in the following motives for tagging video content.

Motives related to indexing:

- Tagging as a means to re-find a movie
- Tagging as a means to make others able to find a movie
- Tagging as a means to clarify or add information to a movie
- Tagging as a means to be able to find information, related to the movie, later on

Motives related to socializing:

- Tagging as a means to recommend a movie to others
- Tagging as a means to find friends or likeminded people

Motives related to communicating:

- Tagging as a means to express a personal opinion
- Tagging as a means of communication

In this paper we will not make claims about the relative importance of the different motives. Comments made by participants in the focus groups suggest that they differ per kind of system and activity (consuming or contributing video content). To label one motive as more important than another in a collection of motives identified in a domain, would be to disregard the subtleties that are present within this domain. Yet, they can serve as input to determine the most important motives for different kinds of systems and activities, as we will do in the second stage of this project.

When we compare our list of motives with the incentives Marlow et al. [5] listed, we must conclude that they partly overlap. Motives that were not mentioned by our participants are tagging as a form gaming and tagging as a means of self-presentation. Tagging as a means of communication is an incentive we found, but which was not mentioned by Marlow et al. Therefore, one must be careful with interpreting generic, multi-modal motives to tag, as the motives to tag content in one specific modality.

Besides the user motives, the focus groups resulted in some interesting insights regarding user barriers to tag. The first issue we want to discuss is *privacy*. Especially the middle-aged respondents were very hesitant to tag because of privacy issues. They were afraid of the possible consequences of submitting information that could be traced to their person. These fears were fed by negative media publicity about user-generated content (e.g., employers searching the internet for information on future employees and finding harmful information). The desire of the middle-aged to remain unknown on the internet was not shared by the young participants. They saw no harm in tagging video content and were not concerned about their privacy in this case.

Second, all participants typed themselves as *information consumers*. They explicitly indicated that, in principle, they only wanted to profit from the work done by others. However, after discussion, the participants agreed that they would tag video

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content for which they felt a passion, which indicates that high personal relevance of the video content is an important antecedent for users to tag.

Finally, the young participants indicated they only sporadically tagged information on the internet because often, they were *unaware of the possibility* to do so. This finding implies that current user interfaces do not confront the user with the option to tag successfully, hence limiting the amount of tags users provide to the system.

5 Future Work

In this paper we have presented the first results of a research project, aimed at gaining a detailed overview of user motives to tag video content in different contexts. In the second stage of this project, we will rank the elicited user motives for different kinds of systems and activities. We will delve into the relationship between a person's affinity with a topic and his or her intention to tag, and finally, we will assess user acceptance of utilizing tags for different personalization purposes (e.g., providing recommendations or to create a personal homepage).

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References

1. Wu, H., Zubair, M., Maly, K.: Harvesting social knowledge from folksonomies. The seventeenth conference on Hypertext and hypermedia, Odense, Denmark (2006)
2. Melenhorst, M., van Setten, M.: Usefulness of tags in providing access to large information systems. IEEE professional communication conference, Seattle, WA (2007)
3. Carmagnola, F., Cena, F., Cortassa, O., Gena, C., Torre, I.: Towards a tag-based user model: How can a user model benefit from tags? In: Conati, C., McKoy, K., Paliouras, G. (eds.): UM 2007, LNAI 4511. Springer-Verlag, Berlin Heidelberg (2007) 445-449
4. van Setten, M., Brussee, R., Van Vliet, H., Gazendam, L., Van Houten, Y., Veenstra, M.: On the importance of "Who tagged what". Workshop on social navigation and community-based adaptation technologies, Dublin, Ireland (2006)
5. Marlow, C., Naaman, M., Boyd, D., Davis, M.: HT06, tagging paper, taxonomy, Flickr, academic article, to read. The seventeenth conference on Hypertext and hypermedia, Odense, Denmark (2006)
6. Ames, M., Naaman, M.: Why we tag: motivations for annotation in mobile and online media. CHI 2007, San Jose, CA (2007)
7. Sen, S., Lam, S.K., Rashid, A.M., Cosley, D., Frankowski, D., Osterhouse, J., Harper, F.M., Riedl, J.: Tagging, communities, vocabulary, evolution. CSCW05, Banff, Canada (2005)