Tagging: Behaviour and Motivations

Vanessa Mirzaee (corresponding author)
Electrical and Computer Engineering Department, The University of British Columbia, 2366 Main Mall, Vancouver, BC, Canada. Tel: 1-604-827-5909, Email: vanesam@ece.ubc.ca

Lee Iverson
Electrical and Computer Engineering Department, The University of British Columbia, 2366 Main Mall, Vancouver, BC, Canada. Tel: 1-604-822-3381, Email: leei@ece.ubc.ca

Abstract
This poster describes the preliminary results of an ongoing investigation aimed at understanding individuals' motivations and behaviour when using a social tagging model to manage (acquire, organize, maintain, and retrieve) their personal and social information space. In the remainder of this paper, we will discuss our study, its context, methodology, and report the preliminary results of our observations.

Introduction
Over the past few years, several research studies have been conducted to investigate social tagging applications and their usage. Predominantly, these studies provide measures of their observations on:

1. Tags (e.g. tag quality [3, 9, 2]; tag literacy [3]; tag type [2])
2. Relations between tags and tagged-items (e.g. tag distribution/proportion [3, 2, 7], tag quality [3, 9]; tag popularity [7]; tag type [2])
3. Relations between tags and taggers (e.g tag usage [4]; tag reuse [2], effects of community tags on individual taggers [2];

Most of these studies attempt to provide quantitative measures to their observations. Therefore, they merely report on visible results of users' behavior and thus do not attempt to examine the actual behavior and motivations behind these. Recently, a few studies have been conducted to try to understand individuals' practices within these tagging spaces. Examples of such studies include: [1] in which interviews were conducted in an effort to understand users' tagging motivations when organizing digital photographs, and [5] where the authors investigate the users search and exploration practices in social tagging applications. We believe that the findings of such studies are essential in understanding the implications of social tagging models and improving the utility and usability of these applications given that these studies observe the users closely and use qualitative measures to understand their practices.

The study described here is an attempt to further such research. In this study, we are investigating users' motivations and behaviour while using a social tagging application to manage their social and personal information. Our main goals can be summarized as follows:

1. Gain a better understanding of users' motivations as to why and how they use tagging models (e.g. How do users tag? What motivates them to tag the way they do?).
2. Investigate users' behaviour patterns as they organize, explore, and retrieve information utilizing these models as well as the users' understanding of their behavioral consequences.
3. Understand the relationship between users' behaviour and motivations (e.g. How do users understand their behavioral consequences? How do people understand the functional consequences of the tagging behavior and in turn, how does this affect their behaviour?)

Study

Context
This study is conducted in the context of Opntag, a Web 2.0 social-personal information management application for note taking and bookmarking developed by our group. Opntag is an open source application primarily developed to facilitate creation, organization and consumption of information and knowledge for an individual operating in a social environment. It is a stable application with around 50 active users. Participants in this study are current users of the Opntag application who use it as part of
their daily personal information management activities. We invited all Opntag users to participate in this study and received a positive response from 10 users.

**Methodology**

This study is being carried out in 3 stages. During the first stage of the study we invited all Opntag users to participate in an online survey where we collected information about users’ background, expertise, and their motivations to use the application. This survey was also designed to gain a general overview of users tagging behaviour.

We also monitored the system usage through storing interaction logs of these participants for the duration of one month. Using the interaction logs, for every interaction that the participants had with Opntag, we kept track of what action was carried out, and when it happened. These data logs will be later analyzed to study both users’ work patterns and the strategies employed to use the application and its tagging features.

These participants will then be interviewed during the third and last stage of the study. The purpose of these interviews is to observe the participants’ interaction with the application and contextually discuss their strategies on why and how they utilized the system. During the interviews, the participants will be asked to give a tour of their personal space within the application to the interviewer. The interviewer will engage the participants in a dialog to understand their strategies for using the system, their classification and organization behaviour, exploration and discovery behaviour, their usage of the tagging features as well as the participants’ sense of the system affordances.

In this paper we report the results of the first stage of the study. The surveys were analyzed in order to characterize and model the participants’ motivations, behaviour, and strategies for using the systems and their own sense of the system’s affordances[ 6].

**Preliminary Findings and Discussion**

A preliminary analysis of the data collected through the surveys highlights two main motivations to use the application: organizing and socializing. Marlow et al. also speculated in [4] that the motivations can be categorized into these two high-level practices. The following figure provide a brief visualization and description as how the participant behaviour is affected by their motivations.

![Figure 1. Relating motivations and behaviour in a social tagging application.](image)

**Conclusions**

In this paper we described the first of a series of studies currently in progress. Our main focus is to try to understand a user’s information management behaviour while utilizing social tagging models. We believe that the
findings presented here are of significant importance to the Web 2.0 (and social tagging) community. The findings presented here are the result of our preliminary analysis of the data gathered in the first stage of this study. Further analysis (in particular analysis of usage data) will allow us to verify the results presented here.

REFERENCES