BASIC ANALYSIS FOR USAGE OF SOCIAL BOOKMARKING SERVICES: DISTINCT PLATFORM AS A TOOL FOR INFORMATION MANAGEMENT

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Abstract

While most social computing platforms like blogs and photo/video sharing sites are designed to upload and share contents generated by users themselves, social bookmarking services (SBM) is a tool to store website information for further reference. The information itself is not newly generated but rather scooped off the web by users. In this paper, we provide a basic analysis of how users in fact utilize SBM. Data gathered from a quantitative survey shows that SBM is used as tool for information management akin to the bookmarking function of browsers installed on local computers. Most users make use of stored data generated by others. Now, in order to effectively utilize the functions of such platforms as SBM and advance from activities reflecting self-interest to the actual creation of commons, we need to research the specific design of these platforms.

1. INTRODUCTION

Among the array of current social computing platforms (Parameswaran and Whinston, 2007), Social bookmarking services (SBM) occupies a unique position. While blogs and photo/video-sharing sites are designed to upload and share contents generated by users themselves, SBM is a tool that allows users to store website information on the Internet. There have been many studies dealing with what motivates users and makes them participate in user communities on various social computing platforms (e.g. Boyd and Ellison, 2006; Nov and Ye, 2008; Beenen et al., 2004). However, most of

these platforms have been designed with a view to support communication among users.

While contents on most social computing services are created by users, SBM provides a means whereby users can store collections of website links to web pages which they wish to remember and share. As users can thus share pointers to various categories of websites, SBM is regarded not only as residing in the communications domain, but also as a knowledge sharing platform per se.

2. RESEARCH METHOD

To determine the extent to which SBM is put to use, we conducted a quantitative survey of users of the Japanese social network service (SNS) *Buzzurl*[1] in May, 2007. We invited 'active users' of Buzzurl via email to fill in and return a specific web survey form. 'Active users' were defined by the following criteria:

- having registered a total of more than ten URLs with more than 10 tags attached
- having registered more than one URL in the one month leading up to the survey

While 258 users qualified by the these criteria, 78 of them (30.2%) returned the completed web questionnaire.

3. RESULTS OF ANALYSIS

3.1. REASONS FOR USING SBM

Table 1 shows reasons for using the social bookmarking service. Nearly 90% of subjects answered they use SBM for personal information retrieval. Choices relating to communication with others came to less than 20%. Few users are motivated to share or diffuse contents generated by others.

Table 1. Reasons for using SBM

	%	N
total	100	78
retrieving personal information	89.7	70
sharing information with friends and relatives	15.4	12
attracting other users with posted URLs	19.2	15
other reasons	5.1	4

3.2. REASONS FOR ATTACHING TAGS

Table 2 shows reasons for attaching tags. Nearly 70% of the subjects stated as their reason "to classify and order URLs" or "to make it easier to search the sites later". While individuals themselves generate tags for information management, the intention of attaching tags is not primarily related to communication among users.

[1] Buzzurl:http://buzzurl.jp/

Table 2. Reasons for attaching tags

	%	N
total	100	78
classifying and ordering URLs	71.8	56
making it easier to search same sites later	69.2	54
keeping site evaluations	33.3	26
maintaining tasks or plans related to sites	15.4	12
leaving messages for authors of sites	14.1	11
other purposes	0.0	0

These results indicate that SBM may be regarded as a tool for information retrieval. Most users appear to be motivated by their own personal utility, using SBM mostly as a tool for information management and not for communication purposes in the sense of other social computing platforms.

Table 3 provides answers to the question of how information generated by other users is in fact put to use. We find that 80% of the subjects make use of accumulated information on SBM in a variety of ways, while the remaining 20% never utilize information registered by others. In other words, most users make mutual use of information generated by others.

Table 3. Uses of information generated by others

	%	N
total	100	78
accessing popular bookmark lists	35.9	28
accessing whole user tag clouds	23.1	18
searching URLs	33.3	26
searching tags	28.2	22
attaching tags of other users to own sites	33.3	26
attaching comments of other users to own sites	28.2	22
accessing URL lists with postings similar to own	24.4	19
browsing URL lists of others	11.5	9
others	0.0	0
never referring to URLs and annotations of others	19.2	15

4. CONCLUSION

The data gathered in the quantitative survey of users of *Buzzurl* allows us to make certain assumptions as to the motivation and attitudes of the subjects toward SBM.

- **Users treat SBM as a tool for personal information retrieval and management.**
  While some users are interested in the responses of other users to existing URL lists, SBM is primarily regarded as a repository of information gathered on the web. This aspect makes SBM different from other social computing platforms.

- **Few users communicate with others on SBM, which works as a tool for individuals.**
  Even though some users are interested in the activities of others, the majority utilizes the

annotating function to increase the efficiency of managing their own information. So SBM users rarely tend to accumulate URL lists and annotations for others. It can therefore be said that the utilization of SBM is not directly related to actual communication.

- **Users make use of metadata generated by others.**
  Nearly 80% of subjects using SBM answered that they refer to annotations and URL lists posted by others. In short, data accumulated on SBM helps individuals with information retrieval and knowledge management.

Our survey shows that SBM is regarded more as a tool than a communications platform. Even though the function of SBM is to rationalize management of one's own personal information, many users benefit from information made available thanks to the activities of others. In this regard SBM differs from other social computing platforms such as SNS and photo sharing sites. The particular features of SBM may open up distinctive mechanisms of diffusing benefits among users. The analysis of what exactly triggers specific patterns of use and benefit on SBM while building loyalty to such platforms ought to reveal important elements of architecture where users come to form communities and collaborate to build commons.

REFERENCES

Beenen, G., Ling, K., Wang, X., Chang, K., Frankowski, D., Resnick, P., and Kraut, R. (2004). Using Social Psychology to Motivate Contributions to Online Communities. In Proceedings of the 2004 ACM Conference on Computer Supported Cooperative Work, p. 212–221.

Boyd, D. M. and Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication, 13(1):210–230.

Nov, O. and Ye, C. (2008). Community Photo Sharing: Motivational and Structural Antecedents. In Proceedings of the 29th International Conference on Information Systems (ICIS2008), page Paper 91. http://aisel.aisnet.org/icis2008/91.

Parameswaran, M. and Whinston, A. (2007). Social Computing: An Overview. Communications of the Association for Information Systems, 19:762–780.