Searching with Tags: Do Tags Help Users Find Things?

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INTRODUCTION

Users of online catalogues and databases often express admiration for the idea of controlled vocabularies, but find it difficult to adapt their vocabulary to the thesaurus. (Fast and Campbell 2004) Controlled vocabulary indexing has also proven costly and not truly scalable when dealing with digital information. Morville (2005) suggests that tagging systems could scale along with web digital information allowing for some indexing of currently unindexed web materials. Studies comparing the terminology used in tagging journal articles to indexer assigned controlled vocabulary terms suggest many tags are subject related and could work well as index terms or entry vocabulary (Kipp 2005; Kipp 2007).

This study examines whether or not users feel that tags enhance resource discovery and how they compare to traditional information retrieval support structures.

SEARCH TASK

Participants searched a traditionally indexed database (PubMed) and a social bookmarking site (CiteULike). Participants were asked to select 5 relevant articles for a library patron based on an examination of the available metadata.

"You are a reference librarian in a science library. A patron approaches the reference desk and asks for information about the application of knowledge management or information organisation techniques in the realm of health information. The patron is looking for 5 articles discussing health information management and is especially interested in case studies, but will accept more theoretical articles as well."

METHODOLOGY

- CamStudio (screen capture software) used to record user input and mouse motions
- Think aloud protocol to capture user comments during and after search
- Collect a) users' judgement of the effectiveness of tags in finding relevant materials b) responses of users to using other people's tags
- Compare to users' responses to using a controlled vocabulary (MeSH)

PARTICIPANT SUGGESTED SEARCH TERMS

Keywords	Frequency
knowledge management/km	9
case studies/case study	6
health information	5
information management	5
health care	3

- 46 unique terms in final lists
- 3 - 16 terms per participant in final lists (median 6)
- final lists similar to initial lists
- other popular terms often MeSH entry vocabulary

PARTICIPANT BEHAVIOUR

"I mostly just looked at the titles of the article, read a little bit of the abstract and then the keyword that I used. I would give that to the user and it would be up to them to decide if the articles were in fact useful and they could continue the search from there." **Participant 1**

"[I] wanted to be able to have subject headings [in PubMed] visible along with the abstract." **Participant 9**

So, I'm looking for knowledge management, then I can just type in knowledge management, and if that user's already bookmarked lots of articles on knowledge management. I can see what they have on their list." **Participant 5**

"You can search by tags or you can search by people and it also shows the people who are interested in this idea... this search term that I put in." **Participant 7**

"[I thought] I wasn't using the tags, but I was actually using them to look at related articles" **Participant 10**

DISCUSSION AND CONCLUSIONS

Knowledge management (KM)

- popular tag on CiteULike and in articles
- related to information management (a MeSH descriptor), but not in MeSH

General Results

- abstract most useful piece of metadata
- related articles as useful as subjects
- participants used tags to aid in search process, selected tags to see returned items

Conclusions

- users wanted access to more metadata, especially abstracts and related articles
- users especially wanted to see how articles were related to each other and praised related articles links in PubMed

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