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The Public Library Catalogue as a Social Space: A Case Study of Social Discovery Systems in Two Canadian Public Libraries

Abstract: This paper uses transaction log data to examine how library users interact with two social discovery systems used in two Canadian public library systems. Results indicate that usergenerated content is not used extensively or significantly in the two social discovery systems. Format is the predominant facet used to refine searches; the remaining facets are significantly underrepresented.

Résumé: Cette étude utilise les journaux transactionnels pour déterminer comment les usagers des bibliothèques interagissent avec deux systèmes de découverte sociaux en place dans deux réseaux de bibliothèques publiques canadiennes. Les résultats indiquent que le contenu généré par les utilisateurs n'est pas utilisé à grande échelle ou de façon importante dans aucun des deux systèmes de découverte sociaux. Le format est la principale facette utilisée pour raffiner les recherches; les autres facettes étant sous-représentées.

1. Introduction

The public library catalogue has long acted as an important and fundamental medium between users and their information needs. The traditional goals and objectives of the library catalogue are to enable users to search a library's collection to find items pertaining to specific titles, authors, or subjects. Today's library catalogues are competing against powerful alternatives for information discovery. If the public library catalogue is to continue to have relevance to its users, it needs to move beyond its current inventory model, where all content is designed and controlled by library staff, and client interaction with catalogue content is limited, to a social catalogue, where users can contribute to, and interact with information and with each other (Calhoun, 2006; Fast & Campbell, 2004; Furner, 2007; Spiteri, 2009). The social catalogue can offer several benefits to public library patrons:

- Users can establish a social space where they share and discuss common reading, listening, and viewing interests;
- Users without easy access to a library branch (e.g., due to illness, limitations to physical mobility, lack of local branch, etc.) can connect to other members of the library and library staff via the catalogue;
- Users can provide a grassroots, democratic "readers' advisory" service, whereby they make recommendations for future reading, for example, based upon shared interests;
- Users can classify items in the catalogue with their own terms (or tags), which may be more reflective of their language and needs than the formal subject headings that are traditionally assigned by library staff.

The goal of this paper is to examine and compare how library users access, use, and

interact with two social discovery systems used in two Canadian public library systems. Transaction log analysis (TLA) is used to answer the following research questions:

- How do public library users interact with social discovery systems? Specifically, which enhanced catalogue features do they use, e.g., faceted navigation, user-contributed content such as tagging, reviews, and ratings, and with which frequency?
- How does usage between the two social discovery systems compare? Specifically, are there commonalities or differences between how public library users use the enhanced catalogue features of the two social discovery systems?

2. Methodology

The social discovery systems provided by AquaBrowser and BiblioCommons were examined. These two systems were chosen because they are presently the only ones used in public libraries in Canada. The target population of the study are library users in the Halifax (HPL) and Edmonton (EPL) public libraries. Daily transaction logs of the social discovery systems used by Halifax and Edmonton were compiled over a four-month period. Daily transaction logs of the social discovery systems used by Halifax and Edmonton will be compiled over a four-month period. A transaction log is an electronic record of interactions that have occurred between a system and users of that system. Transaction log analysis (TLA) is a way of collecting data unobtrusively without directly interfacing with the catalogue users and that allows researchers to observe and analyze user behaviours. TLA can provide useful information about how the features of a system are used and can inform decisions about how these features can be improved. Focus was placed on examining data pertaining to features that are unique to social discovery systems, such as advanced faceted navigation and user-contributed (or social) features. Measures logged and examined from both discovery systems include:

- Type of search used (e.g., basic or advanced)
- Use of search refine features (i.e., faceted navigation)
- Use of tagging features
- Use of posted reviews
- Use of ratings features

In order to obtain a more detailed snapshot of how users contribute metadata to bibliographic records, a set of 50 monograph records was examined (weekly) in both systems to track changes to tags, reviews, and ratings assigned by the clients. The records were divided as follows:

- 10 Adult fiction
- 10 Adult non-fiction
- 10 Children's fiction
- 10 Children's non-fiction
- 10 Graphic novels

3. Results

User-generated content cannot be accessed easily via the search and faceted navigation provided by the two systems. No tag clouds exist in either system, and only

BiblioCommons includes a tag field in its advanced search option. There is no easy way in AquaBrowser to search by tag other than by clicking on individual tags that appear in any one catalogue record. General keyword searching far surpasses any other type of search method available in either system; in BiblioCommons, tags are used infrequently to search for items. Directory-style browsing of records or predetermined pathways dominates search type in BiblioCommons. The single basic search box (no drop-down menu) dominates search type in AquaBrowser. With respect to using user-generated content as facets by which to refine search results, both BiblioCommons and AquaBrowser allow you to narrow your search by only user tag. Even though both systems provide 13-14 facets by which to refine search results, refining searches by format, which is a feature in most "standard" library catalogues, predominates all other ways of refining searches (e.g., by time period, target audience, etc.).

Options for user-generated content differ significantly between the two systems. In AquaBrowser, clients can add: Lists, Ratings, Reviews, and Tags. In BiblioCommons, clients can add: Age suitability; Comments; Content notes; I own this; Lists; Private notes; Quotations; Ratings; Similar titles; Summaries; Tags. Clients can also communicate with each other via an internal messaging system. User-generated content is not used extensively or significantly in the two social discovery systems observed. List creation predominates user-generated content; ratings, reviews, and tags rank significantly lower. With respect to the 50 observed records, only 6 records were assigned were assigned user tags in AquaBrowser: One record was assigned 2, while the other 5 were each assigned one tag. No ratings or reviews were assigned to any of the records. In BiblioCommons, tags were assigned to 3 records, comments to 10, and ratings to 32.

4. Conclusions

The results of our analysis suggest that clients of both Edmonton and Halifax public libraries are making limited use of the social features of the system that allow them to interact with the catalogue records and with one another. While BiblioCommons, in particular, shows promising results with respect to user-generated lists (e.g., I own this), most social features are noticeably underused. The tracking of the 50 records in both systems is particularly telling of the lack of user-assigned tags, ratings, and reviews. Since the implementation and maintenance of social discovery systems is costly, it is important for library management to make informed decisions about which system features are the most cost effective and how these features may be better tailored to meet user needs. A noticeable limitation of transaction log analysis is that it does not tell us why clients use these features and, perhaps more importantly, why they do not. Future research will thus focus on clients' motivations for engaging with the social features of social discovery systems, and their perceptions of, and satisfaction with, the benefits of these features.

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