

## **bX: Supercharge Your Researchers: Recommendations for Scholarly Articles**

### **Background**

Despite the significant, and escalating, trend from print to electronic for scholarly resources, many of the supporting tools for scholarly evaluation remain firmly entrenched in the print domain. For example, scholarly quality is evaluated by citation counts that apply to vetted literature only and are based on citation frequency over a 2-3 year period creating significant delays in measures. The electronic paradigm changes everything with new models of communication and new models of scholarship, and offers immediacy to the evaluative measures.



Further, Web 2.0 models, and trends of participation and collaboration, highlight the values inherent in user communities – the content users create, and the choices and preferences that they make (e.g. clickstreams). Recommender services, based on users' choices, are prevalent on the Web for ecommerce sites such as NetFlix and Amazon. Such systems are now entering the domain of scholarly material, specifically of library material, but with a focus mainly on books e.g. LibraryThing ([www.librarything.com](http://www.librarything.com)), BibTip ([www.bibtip.org](http://www.bibtip.org)).

New tools and new metrics of evaluation are needed to help researchers and learners find relevant scholarly materials in a rapidly expanding corpus of information. Specifically, recommender services pertaining to the core unit of scholarly use - namely the article level - are now needed.

### **bX and SFX**

The new bX service from Ex Libris, which derives from the blackbox research project at Los Alamos National Laboratory (LANL) (February 2005 to April 2006), is built on aggregate usage information from multiple linking servers. The LANL blackbox project, and the involvement, in a prototype, of Ex Libris and California State University, a long-standing SFX Customer, is well documented in a report by Herbert Van de Sompel and Johan Bollen [Ref 1]. bX is based on the observation that linking servers (such as SFX) record activities and usage patterns across multiple resources of a digital library [Ref 2]. As such, usage logs from a linking server are highly representative of the activities and preferences of the population that uses the linking server. Moreover, this extends beyond the single institution: a federation of usage logs across multiple institutions becomes increasingly representative of the activities of a larger and more global users' community.

A number of interesting projects are now focused on the evaluation of usage data, particularly vis-à-vis journal literature. These include the MESUR project ([www.mesur.org](http://www.mesur.org)) run by LANL and the UKSG Usage Factors project ([www.uksg.org/usagefactors](http://www.uksg.org/usagefactors)).

## bX Services

Ex Libris will be launching a range of bx services in Quarter II 2009.

The initial bX services focus on two applications of linking server logs, at both the local and federated level:

- Recommender services (for end-users): a log-driven tool to support users in the discovery process, identifying related articles of potential interest to a researcher and learner.
- Web analytics (for staff): mining of the usage data to obtain a variety of analytics including those that could inform collection development decisions.

Further, the mining of usage logs offer interesting opportunities for deriving other metrics as is being demonstrated by the MESUR project. The possibilities exist to derive new metrics that could function as quality indicators of scholarly materials, and as such could be used in parallel with the ISI impact metrics that are dominant in this realm.

Initially the bX services will use only usage log data contributed by SFX customers, including individual institutions and consortia. Further, the recommender and web analytic services will be offered in the initial phase only to SFX customers. SFX customers may participate as contributors to- or consumers of the bx service – or both.

Below you can see an example of a bX recommendation:

**Title:** Psychological Predictors of Chronic Posttraumatic Stress Disorder After Motor Vehicle Accidents

**Source:** Journal of abnormal psychology [0021-843X] Ehlers **Year:** 1998 **Volume:** 107 **Page:** 508

### Recommended Reading (powered by bX)

Users interested in this article also expressed an interest in **other articles**

Most recommended reading:

1. Murray, James J. "Dissociation and post-traumatic stress disorder: Two prospective studies of road traffic accident survivors." *The British journal of psychiatry*. 180.4 (0003): 363-368.
2. Ehlers, Anke A. "Dysfunctional meaning of posttraumatic intrusions in chronic PTSD." *Behaviour Research and Therapy*. 38.6 (2000): 537-558. [Full Text](#)
3. Mathews, Andrew A. "Why worry? The cognitive function of anxiety" *Behaviour Research and Therapy*. 28.6 (1990): 455-468. [Full Text](#)
4. Amir, N N. "Relationship between trauma narratives and trauma pathology." *Journal of Traumatic Stress*. 11.2 (1998): 385-92. [Full Text](#)
5. Johansen, Venke V. "Prevalence and predictors of post-traumatic stress disorder (PTSD) in physically injured victims of non-domestic violence." *Social psychiatry and psychiatric epidemiology*. 42.7 (2007): 583-593. [Full Text](#)



### **References**

1. J. Bollen and H. Van de Sompel. *An architecture for the aggregation and analysis of scholarly usage data*. 24 May 2006.

[http://public.lanl.gov/herbertv/papers/jcdl06\\_accepted\\_version.pdf](http://public.lanl.gov/herbertv/papers/jcdl06_accepted_version.pdf)

2. H. Van de Sompel and P. Hochstenbach. *Reference linking in a hybrid library environment. Part 2: SFX, a generic linking solution*. D-Lib Magazine **1999**, 5(4).

[http://www.dlib.org/dlib/april99/van\\_de\\_sompel/04van\\_de\\_sompel-pt2.html](http://www.dlib.org/dlib/april99/van_de_sompel/04van_de_sompel-pt2.html)