

Privacy and Cloud Computing in Public Libraries: The Case of BiblioCommons

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Abstract

Public libraries are increasingly turning to cloud computing solutions to satisfy their technological needs in order to best serve patrons, while simultaneously taking advantage of new opportunities for cost savings, flexibility, and enhanced data management. These cloud services are typically provided by third parties who have built robust solutions to help libraries deliver resources, services, and expertise efficiently, while also encouraging patrons to socialize and leverage the power of the community of users. The use of cloud computing in libraries, however, has the potential to disrupt longstanding ethical norms within librarianship dedicated to protecting patron privacy. While librarians have historically engaged in professional practices that limit retention of patron data and protected confidentiality, cloud computing platforms are largely based on the tracking, collection, and aggregation of user data. This poster will report on a pilot study to help us understand how libraries address, if at all, issues of patron privacy in the use of third-party cloud computing services.

Keywords: Privacy, cloud computing, library ethics, patron privacy, information policy

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1 Introduction

In today's information ecosystem, libraries increasingly incorporate interactive, collaborative, and user-centered features of the so-called "Web 2.0" world into traditional library services, thereby creating "Library 2.0" (Casey & Savastinuk, 2007; Courtney, 2007; see, for example, Farkas, 2007). Examples include: providing patrons the ability to evaluate and comment on particular items in a library's collection through discussion forums or comment threads; creating dynamic and personalized recommendation systems ("other patrons who checked out this book also borrowed these items"); using blogs, wikis, and related user-centered platforms to encourage communication and interaction among/between library staff and patrons; and interfacing various library collections and services with relevant Web 2.0 platforms, such as Delicious, GoodReads, and Facebook.

Along with these user-centered technological enhancements, libraries also face a dilemma on how to provide the most powerful and efficient library management systems to help inform data-driven decision-making, when confronted with shrinking budgets, limited staff, and increased complexity of technological solutions. Thus, libraries are increasingly turning to rapidly evolving cloud computing solutions to satisfy their technological needs in order to best serve patrons, while taking advantage of new opportunities for cost savings, flexibility, and enhanced data management. These cloud services are typically provided by third parties who have built robust solutions to help libraries deliver resources, services, and expertise efficiently, and encourage patrons to participate in a network that empowers them to socialize and leverage the power of the community of users (Breeding, 2012; Goldner, 2010). Examples of cloud computing platforms for libraries include OCLC WorldShare, Ex Libris Alma, and BiblioCommons.

The transition to cloud computing in libraries, however, has the potential to disrupt longstanding ethical norms within librarianship dedicated to protecting patron privacy. Traditionally, the context of the library brings with it specific norms of information flow regarding patron activity, including a professional commitment to patron privacy (American Library Association, 2012; Gorman, 2000; Morgan, 2006). In the library, users' intellectual activities are protected by decades of established norms and practices intended to preserve patron privacy and confidentiality, most stemming from the ALA's Library Bill of Rights and related interpretations. As a matter of professional ethics, most libraries protect patron privacy by engaging in limited tracking of user activities, having short-term data retention policies (many libraries actually delete the record that a patron ever borrowed a book once it is returned), and generally enable the anonymous browsing of materials (you can walk into a public library, read all day, and walk out, and there is no systematic method of tracking who you are or what you've read). These are the existing privacy norms within the library context.

The move towards cloud computing platforms threatens to disrupt these norms (Litwin, 2006; Zimmer, 2013a; Zimmer, 2013b). Much of cloud computing is based upon—indeed, built upon—

encouraging increased information flows and the tracking, capturing, and aggregating of data about users' activities. The prevalence of open flows of personal information on and across cloud and Web 2.0 platforms have prompted general concerns over the impact on user privacy (Barnes, 2006; Harris, 2006; Solove, 2007; Zimmer, 2008). In order to take full advantage of Web 2.0 and cloud-based platforms and technologies to deliver services, libraries will inevitably need to capture and retain personal information from their patrons. While these privacy concerns have been studied in the context of how public schools are embracing cloud computing (Reidenberg, Russell, Kovnot, Norton, & Cloutier, 2013), little work as been done to date to investigate actual implementation of cloud computing in the library context in order to assess the implications for patron privacy.

2 The Case of BiblioCommons

The poster will present preliminary results of a pilot study designed to help us understand how libraries address, if at all, issues of patron privacy in the use of third-party cloud computing services. To limit the scale of the investigation, the project will focus on the cloud computing provider BiblioCommons, who provides an "integrated 'social discovery experience to the online customers of public libraries" through a product called BiblioCore that replaces the traditional functionality of a library's self-hosted online catalog and integrates it into a cloud-based platform that aggregates the shared expertise, opinions and recommendations of patrons across all participating libraries, and integrates those contributions back into the local catalog in intelligent ways that create a "social discovery" experience for patrons (BiblioCommons, n.d.). Thrity-five public libraries or library systems are listed as U.S. customers of BiblioCommons, including the New York Public Library, Chicago Public Library, Seattle Public Library, and other small-, medium-, and large-scale libraries.

Focusing on these 35 libraries' adoption of BiblioCommons as their cloud computing provider, this poster will present preliminary results to these research questions: (1) How is each library implementing BiblioCommons? Which products and features are being used, and how? (2) What patron data is being collected, aggregated, stored locally, and shared with BiblioCommons? (3) How are the libraries addressing patron privacy? Is data being anonymized? Are patrons informed of any data collection and sharing? Have privacy policies been provided?

3 Methodology

Research question 1 will be addressed through two methods: First, the research will team engage in a large-scale observational study of the websites for each of the 35 libraries to identify and catalog any visible implementation of BiblioCore or other BiblioCommons products. Second, each library will be contacted via an open records request to obtain materials or notices provided to patrons describing the cloud-based services provided, as well as copies of all contracts or user agreements the library might have with BiblioCommons.

Building the collection and coding of the documents received in support of R1, addressing R2 will involve a technical analysis of each library's implementation of BiblioCommons services, documenting how the user interacts with the service, determining what kind of data is collected, and mapping out the flow of information. This information will be gathered from the language outlined in the contracts with BiblioCommons as well as the cloud provider's own technical materials, supplemented by a technical analysis of each library's particular implementation of the BiblioCommons platform.

Question 3 will be answered through the analysis of the results of R1 and R2, paying particular attention to materials provided to patrons, such as the New York Public Library's overview of privacy issues provided for patrons (New York Public Library, n.d.), the legal agreements with BiblioCommons, and the libraries' own privacy policies.

4 Significance

The results of this pilot project's multi-method analyses will provide greater understanding of any gaps in how issues of patron privacy are understood and addressed within the broader implementation of cloud computing within libraries. The results of this project will be applicable to the entire library and information profession community, providing conceptual clarity to issues of patron privacy in the Web 2.0 era, and will promote the innovative use of technology to facilitate discovery of knowledge and cultural heritage.

References

American Library Association. (2012). Policy concerning Confidentiality of Personally Identifiable Information about Library Users. Retrieved from

- <http://www.ala.org/Template.cfm?Section=otherpolicies&Template=/ContentManagement/ContentDisplay.cfm&ContentID=13087>
- Barnes, S. (2006). A privacy paradox: Social networking in the United States. Retrieved January 2, 2011, from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1394/1312>
- BiblioCommons. (n.d.). A better online catalog is just the beginning. Retrieved September 10, 2014, from <http://www.bibliocommons.com/about/about-us>
- Breeding, M. (2012). *Cloud computing for libraries* (Vol. 11). American Library Association.
- Casey, M., & Savastinuk, L. (2007). *Library 2.0: A Guide to Participatory Library Service*. Information Today, Inc.
- Courtney, N. (2007). *Library 2.0 and Beyond: Innovative Technologies and Tomorrow's User*. Libraries Unlimited.
- Farkas, M. G. (2007). *Social Software in Libraries: Building Collaboration, Communication, and Community Online*. Medford, N.J: Information Today.
- Goldner, M. R. (2010). Winds of Change: Libraries and Cloud Computing. *BIBLIOTHEK Forschung Und Praxis*, 34(3), 270–275. doi:10.1515/bfup.2010.042
- Gorman, M. (2000). *Our enduring values: Librarianship in the 21st century*. Chicago: American Library Association.
- Harris, W. (2006). Why Web 2.0 will end your privacy. Retrieved from http://www.bit-tech.net/columns/2006/06/03/web_2_privacy/1
- Litwin, R. (2006). The central problem of library 2.0: privacy. Retrieved from <http://libraryjuicepress.com/blog/?p=68>
- Morgan, C. (2006). Intellectual Freedom: An Enduring and All-Embracing Concept. In American Library Association (Ed.), *Intellectual Freedom Manual* (Vol. Intellectual Freedom Manual Chicago, pp. 3–13). American Library Association.
- New York Public Library. (n.d.). Overview of Privacy Issues for NYPL's New Catalog. Retrieved September 10, 2014, from <http://www.nypl.org/help/about-nypl/legal-notice/overview-privacy-issues-new-catalog>
- Reidenberg, J., Russell, N. C., Kovnot, J., Norton, T. B., & Cloutier, R. (2013). *Privacy and Cloud Computing in Public Schools*. Center on Law and Information Policy. Retrieved from <http://ir.lawnet.fordham.edu/clip/2/>
- Solove, D. (2007). *The Future of Reputation: Gossip, Rumor, and Privacy on the Internet*. New Haven, CT: Yale University Press.
- Zimmer, M. (2008). The Externalities of Search 2.0: The Emerging Privacy Threats when the Drive for the Perfect Search Engine meets Web 2.0. Retrieved January 2, 2013, from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2136/1944>
- Zimmer, M. (2013a). Assessing the Treatment of Patron Privacy in Library 2.0 Literature. *Information Technology and Libraries*, 32(2), 29–41. doi:10.6017/ital.v32i2.3420
- Zimmer, M. (2013b). Patron Privacy in the “2.0” Era: Avoiding the Faustian Bargain of Library 2.0. *Journal of Information Ethics*.