

Participatory Networks

The Library as Conversation

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EXECUTIVE SUMMARY

The complete text of the technology brief “Participatory Networks: The Library as Conversation” is available at <http://iis.syr.edu/projects/PNOpen/>. The following summary provides a detailed overview of the paper, but the complete work provides examples and illustrations of the concepts.

Goal

The goal of the technology brief is to familiarize library decision makers with the opportunities and challenges of participatory networks. In order to accomplish this goal the brief is divided into four sections:

1. A **conceptual framework** for understanding and evaluating participatory networks (see the *Library as a Facilitator of Conversation* section in the full brief)
2. A discussion of **key concepts and technologies** in participatory networks drawn primarily from Web 2.0 and Library 2.0 (see the *Participatory Networking, Social Networks and Web 2.0* section in the full brief)
3. A merging of the conceptual framework with the technological discussion to present a **roadmap for library systems development** (see the *Libraries as Participatory Conversations* section in the full brief)
4. A set of **recommendations** to foster greater discussion and action on the topic of participatory networks and, more broadly, participatory librarianship (see the *Recommendations* section in the full brief).

This summary will highlight the discussions in each of these four topics. For consistency, the section numbers and titles from the full brief are used.

1. Library as a Facilitator of Conversation

This section describes a participatory model that is later applied to modern web services as participatory networking, and a broader new approach to libraries: *participatory librarianship*. The theoretical foundation of this model, Conversation Theory, posits that individuals, organizations, and even societies build knowledge through conversation; specifically, by interacting and building commonly held agreements. Since libraries are in the knowledge business, they are also in the conversation business. The library community implicitly adds a corollary to this theory: the best knowledge comes from an optimal information environment, one in which the most diverse and complete information is available to the conversant(s). Conversation Theory is very much in line with current and past library practice, and shows a clear trajectory for the future.

The value of this viewpoint is not just theoretical, it has real consequences and uses. For example, much of library evaluation has been based in numeric counts of tangible outputs: books circulated, collection size, reference transactions, and

so on. Yet this quantitative approach has been frustrating to many who feel they are counting outcomes, but not getting at true impact of library service. Librarians may ask themselves, “Which numbers are important...and why?” If libraries focused on conversations, however, there might be some clarity and cohesion between statistics and other outcomes. Suddenly, the number of reference questions can be linked to items cataloged or to circulation numbers; they are all markers of the scope and scale of conversations within the library context. This approach might enable the library community to better identify its most important conversations and demonstrate direct contributions to these conversations across functions.

2. Participatory Networking, Social Networks and Web 2.0

The brief then turns to the operational and technological underpinnings of participatory networking. Core concepts from Web 2.0 are:

- **Social Networks:** A core concept of Web 2.0 is that people are the content of sites. That is, a site is not populated with information for users to consume. Instead, services are provided to individual users for them to build networks of friends and other groups (professional, recreational, etc.). The content of a site, then, is comprised of user-provided information that attracts new members of an ever-expanding network.
- **Wisdom of Crowds:** There has been some research into the quality of mass decision-making. That research shows how remarkably accurate groups are in their judgments. Web 2.0 pools large groups of users to comment on decisions. This aggregation of input is facilitated by the ready availability of social networking sites. Certainly this approach of community organization and verification of knowledge also has its detractors. Many, for example, question the wisdom seen in some entries of Wikipedia. Yet, recent articles have compared this mass editing process favorably to traditional sources of information such as the Encyclopedia Britannica¹.
- **Loosely Coupled APIs:** API is shorthand for “Application Programming Interface.” APIs provide sets of instructions (messages) that a programmer can use to make applications communicate with each other. APIs allow programmers to incorporate one piece of software they may not be able to directly manipulate (code) into another and vary in their ease of integration. Loosely coupled APIs allow for very easy integration using high-level scripting languages (like Javascript).
- **Mashups:** Mashups are combinations of APIs and data that result in new information resources and services.
- **Permanent Betas:** The concept of a permanent beta is, in part, a realization that no software is ever truly complete so long as the user community is still

¹ <http://www.nature.com/nature/journal/v438/n7070/full/438900a.html>

commenting upon it. Permanent beta is also a design strategy. Large applications are broken into smaller constituent parts that can be manipulated separately. This allows large applications to be continually developed by a more diverse and distributed community (as in open source).

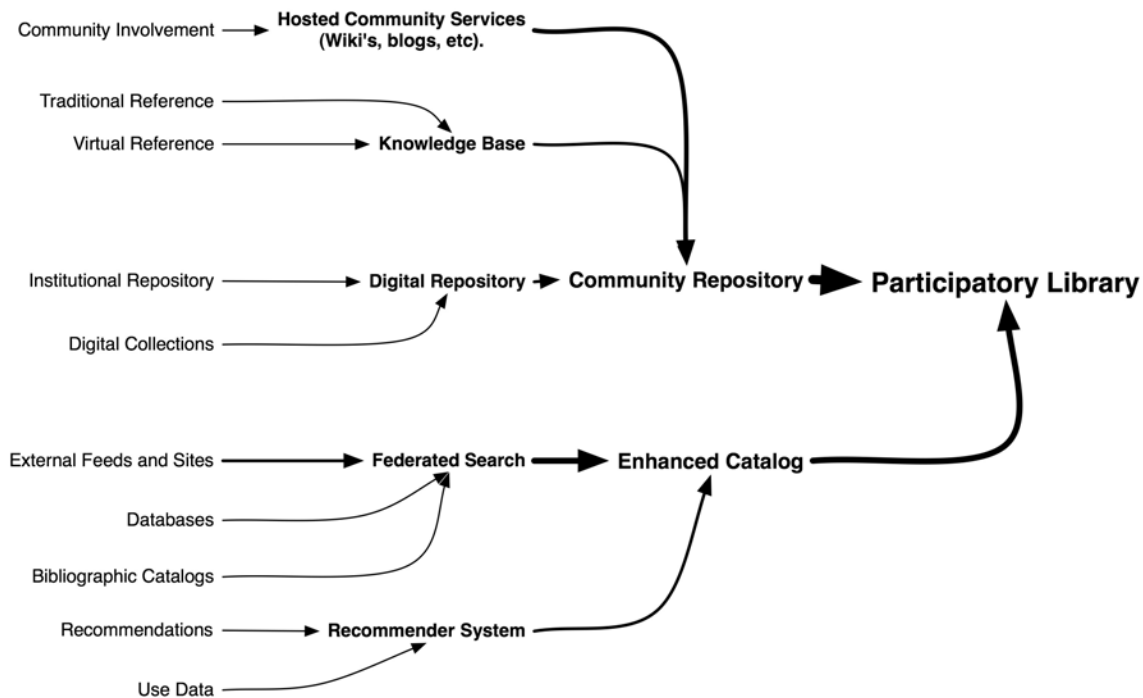
- **Software Gets Better the More People Use It:** The true value of social networking sites, and all sites that seek to capitalize on user input (reviews, annotations, profiles, etc), is defined by the number of people it can bring together.
- **Folksonomies:** A folksonomy is a classification system created in a bottom up fashion, and with no central coordination. In a folksonomy, the members of a group simply attach terms (or “tags”) to items, such as photos or blog postings, and the aggregate of these terms is seen as the classification. What emerges is a classification scheme that prioritizes common usage over semantic clarity.

There are two key technologies that underlie much of the current Web 2.0 work: AJAX (Asynchronous JavaScript and XML), which allows for a more desktop experience through a Web browser, and Web Services, which allow for easy communications between applications over the Web.

Section 2 ends with a discussion of Library 2.0. Current initiatives in the library world to bring the tools of Web 2.0 to the service of Library 2.0 are exciting and innovative, and, more to the point, they are supportive of the library’s purpose. They may, however, incur costs -- such as monitoring blogs and Wikis, creating content, and corresponding with users -- that stretch already inadequate resources even further. It is hoped that some of the concepts in participatory librarianship may answer these questions and help further the innovations of the Library 2.0 community.

3. Libraries as Participatory Conversations

Section 3 outlines a sort of roadmap from the current array of library systems to truly participatory systems. Included is a way to create “The Library,” a unified view of libraries, that will let users find the most appropriate local library service as easily as they find and use services on Google and Amazon. The following figure lays out a progression from current systems to truly participatory library systems.



Along the left side of the graph are current library functional systems. While the terminology may differ from library to library, nearly every system can be found on today's library websites. By showing the systems together, the problems of user confusion and library management burden become obvious. Users must often navigate these systems based on their needs, and often with little help. Should they search the catalogs first, or the databases? Isn't the catalog really just another database? Which databases should they choose? In our attempts to better serve the users by creating a rich set of resources and services, we have instead complicated their information seeking. As one librarian puts it, "don't give me one more system that I, or my patrons, have to deal with."

From the array of systems on the left hand, we can see that libraries have not been doing themselves any favors either. We are already maintaining many systems, therefore making calls for yet more systems not only impractical but unwise. The answer is to integrate systems, combining the best of each while discarding the complexity of the whole. The library world is in the midst of doing just that. This section seeks to highlight promising developments in integrating library systems well beyond the library catalog and to highlight not only an ideal end-point, but also how this ideal system is truly participatory.

4. Recommendations

Section 4 contains the overall recommendation of this brief: that libraries must be active participants in the ongoing conversations about participatory networking. They must do so through action, by modeling appropriate and innovative use of technologies. This must be done at the core of the library, not on the periphery. Rather than just adding blogs and photosharing, libraries should adopt the

principles of participation in existing core library technologies such as the catalog. Anything less simply adds stress and stretches scarce resources even further.

To complement this broad recommendation, the authors make two specific proposals: expand and deepen the discussion and understanding of participatory networks and participatory librarianship, and create a “participatory library test bed” both to give librarians needed participatory skills and to sustain a standing research agenda in participatory librarianship.