Technology Trends for a 2.0 World

rends in social software and customized, participatory technologies are changing user expectations. Libraries must, in turn, adjust to meet those needs. To enable libraries to adjust, I advocate for librarians to be trendspotters.

Each year, I write a blog post that looks at "Ten Techie Things for Librarians." This chapter looks at the list for 2007. (You'll find the entries from 2006 and 2005 listed in the Resources box at the end of the chapter.) It is updated and expanded from the original blog post, and it also expands on ideas from chapter 1. Thanks to my blog readers for the feedback and comments that shaped this published version.

Looking at trends will better prepare us for the next wave of societal and technological change. In my teaching and work with library groups, my message for new professionals, as well as for all librarians, has been:

- Learn to learn.
- Adapt to change.
- Scan the horizon.

These are the traits and broad skills of what we could call Librarian 2.0. I've written about Librarian 2.0, as have many others. (See the sidebar on page 30 for a reprint of my "Into a New World of Librarianship" from OCLC NextSpace.) To build a future of thriving libraries—physical and virtual—and thriving library professionals who are recognized as leaders in the information world, we need

- implement user-centered planning and services
- · control technolust on the institutional level
- become trendspotters

The third item in each of these lists is critical to preparing for the future. As we carry out our essential mission of service, stewardship, and access, I really want folks in libraries to be able to watch the horizon for trends. We can all be trendspotters. We can all watch for trends that impact not only the profession but also our specific communities and user groups.

Conversations

The tools of Web 2.0 create and encourage conversations that are playing out every day in every way about all manner of things. People want to talk to each other, and the Web has enabled conversations like never before. Remember your first e-mail discussion list? Your first post and subsequent discussion at an online forum? I certainly remember mine. In 1994 I discovered a thriving online community focused on Twin Peaks and a newly forming Stevie Nicks fandom community. Who knew that now we'd find a community and an ongoing conversation for practically every subject under the sun, as well as more ways to have those conversations in virtual spaces?

A recent personal experience shows that today's online conversations do not need to be organized or planned. Losing my 13-year-old yellow Labrador Jake on June 18, 2007, was a notably sad occasion that fell within a day of defending my dissertation. In dealing with situation, I took much solace from sharing Jake's story via Flickr. I honored Jake's passing in a post called "A Pink Blanket" (see figure 10), and the comments and "favoriting" that occurred on that post speak volumes about the power of conversation in the new Web.



Figure 10 "A Pink Blanket" on Flickr.

Karen Schneider found the words I couldn't find that day to express what was happening. Her post on her blog, Free Range Librarian, was called "Pets, Social Software, and Unconditional Love":

Pets bring out the best in us: in exchange for unconditional love, they tease out our deep capacity to care for others and our abilities to parent. The tragedy of pets is that if we are lucky we outlive them, but the triumph is that pets teach us again and again the sweet brevity of life. Michael has documented all of this on Flickr-the love and the grief and the brevity—and he and I, and all of us, are closer for it.1

A new level of discourse is taking place online, and it will take place with or without you. Find ways to participate. Give folks a place to "talk" in your online realm. It might be something as snazzy as the SOPAC at Ann Arbor or Hennepin County Public Library's catalog comments, or it might be simply a "What's New" blog for your library on Blogger or Wordpress with comments turned on.

What does this mean for libraries?

Translate these conversations to the library. Look at the comments around Marley and Me at Hennepin County Library's catalog. Check out other sites that encourage conversation via comments. Libraries, companies, organizations, and groups: if you are implementing a blog or other 2.0 technology, please enable conversations. How might you talk with your staff and your users?

Convergence

I was sitting in my hotel room in Iowa last October, the day a small plane crashed into a New York City high rise. CNN was covering the story and used a stream of incoming images uploaded to Flickr to show the scene. This signaled yet another milestone on the road toward convergence: devices, technology, societal shift, media, and conversations.

The Convergence Culture Consortium site at MIT offers this definition:

Convergence describes a process rather than an endpoint. More than just technological consolidation, the process of convergence is distinguished by changing consumer flows through the media landscape. It represents a tectonic shift that has altered the relationship between existing technologies, industries, markets, genres and audi-

Into a New World of Librarianship

Sharpen these skills for Librarian 2.0

One of the principles I would add to the Library 2.0 meme is that "the Library is human" because it makes the library a social and emotionally engaging center for learning and experience. Librarian 2.0, then, is the "strategy guide" for helping users find information, gather knowledge and create content. The most important traits of Librarian 2.0 include:

- Librarian 2.0 plans for their users. This librarian bases all planning and proposals for services, materials and outreach on user needs and wants. Usercentered libraries break down barriers and allow users access wherever they are: home, work, commuting, school, or at the library. This involves users from the get go in planning and launching services based on their needs. This librarian asks what new technologies or new materials users need. This librarian proposes building projects and involves users in designing those places. This librarian does not create policies and procedures that impede users' access to the library. This librarian tells users how resources and funds will be expended. Decisions and plans are discussed in open forums and comments are answered. This makes the library transparent.
- Librarian 2.0 embraces Web 2.0 tools. This librarian recognizes how services might be enhanced by the Read/Write web and how new services might be born in a climate of collaboration. This librarian uses Instant Messaging to meet users in their space online, builds Weblogs and wikis as resources to further the mission of the library, and mashes up content via API (Application Program Interface) to build useful Web sites. A Google map mash up of local libraries created by Chicago librarians is one such instance of building tools via new resources. Other librarians creating MySpace profiles and participating in other thriving communities build connections online where their users live.
- Librarian 2.0 controls technolust. This librarian does not buy technology for the sake of technology. "Techno-worship" does not exist here. Without a firm foundation in the mission and goals of the institution, new technologies are not implemented for the sake of coolness and status. Technology is put to the test: Does it meet the users' need in a new or improved way? Does it create a useful service for

- putting users together with the information and experience they seek? These are some of the guestions this librarian asks when planning for technology. This librarian creates and nurtures a living, breathing technology plan.
- Librarian 2.0 makes good, yet fast decisions. This librarian recognizes how quickly the world and library users change with advancing technology. Project timelines that stretch on for months simply do not work in Library 2.0 thinking. Perpetual beta works well for the library's Web presence. This librarian redesigns for ease of use, user involvement and easily added/ re-configured pieces. This librarian brings evidence to the table for planning sessions and decision-making, such as recent studies from Pew, articles from professional and scholarly journals and a synthesis of on topic postings from the biblioblogosphere.
- **Librarian 2.0 is a trendspotter.** This librarian seeks out information and news that may impact future services. This librarian has read the OCLC Pattern Recognition and User Perception reports and uses them in planning. This librarian uses The Cluetrain Manifesto and realizes that networked markets are library users as well and that honest, human conversations need to take place within their institution, virtually and in physical space. This librarian reads outside the profession and watches for the impact of technology on users and new thinking on business, because it is, in fact, related.
- **Librarian 2.0 gets content.** This librarian understands that the future of libraries will be guided by how users access, consume and create content. Content is a conversation as well and librarians should participate. Users will create their own mash ups, remixes and original expressions and should be able to do so at the library or via the library's resources. This librarian will help users become their own programming director for all of the content available to them.

Librarian 2.0 also listens to staff and users when planning, tells the stories of successes and failures, learns from both, celebrates those successes, allows staff time to play and learn, and never stops dreaming about the best library services.

Reprinted from OCLC NextSpace, no. 2 (Spring 2006), with permission

ences. This altered relationship privileges "expressions" over "impressions"; engaged consumers draw together information across multiple media experiences creating new touchpoints for your brands. Convergence culture calls for a renegotiation of the expectations of media content producers and advertisers, of media producers and audiences.2

Pay close attention to the work of Henry Jenkins, including his recent book Convergence Culture. I'm still pondering his ideas and have a ways to go to completely understand the implications and impact of the interaction of people with these new and shifting methods of mass communication. I'm also looking at how to incorporate such innovative thinking into the classes I teach at Dominican University GSLIS. From Slashdot comes a review of Convergence Culture with a useful example for understanding this phenomenon:

In one example, he follows the progression of the Harry Potter franchise after Warner Brothers purchased the film rights. In the interest of protecting their trademark, the studio sent out cease-and-desist letters to an online network of pre/teen [largely] girls who had been writing and sharing stories about Harry Potter as a way of learning to improve their writing skills. Rather than desisting, they coordinated a global protest that became a major P.R. headache for Warner Brothers-who ultimately had to back down.3

In my Tech Trends talks, I've used an image of the Apple iPhone for this point. I can make a joke or two about one of my favorite subjects, which I've been addressing for a long time-technolust. When it comes to me and the iPhone, personal technolust is okay, but institutional technolust is something to keep in check. It also means something more. The iPod on some level changed the world. The iPhone may as well: user interface, ease of use, pulling together a seamless experience of voice, data, Web. Watch closely.

From MacWorld comes "Analysis: iPhone and the Emergence of Convergence," in which Glenn Fleischmann writes:

The next step beyond converged calling is convergence of all devices. . . . For instance, if you're carrying a suspiciously small, touch-sensitive video player—a forthcoming device made by a company based in Cupertino, Calif., say-you could be watching streaming, on-demand video while riding a train home from work using the on-board Wi-Fi now showing up on many transit systems.

As you get off the train, the device switches, without noticeable stutter, to the high-speed cell network. The quality of the video drops down as does the audio, but it doesn't drop. You walk home, your eyes still locked on the screen, and you step in the door, plop this mystery device in a dock attached to your high-definition television, and the service switches over to the 50 Mbps fiber connection to your home, and the video continues, but now in 1080p with 5.1 surround sound.4

What does this mean for libraries?

A thread running through all of these trends is the idea that the general public has to some degree adopted tools and technologies that allow them to interact with media. This will not stop as prices fall and more folks move to one device for access to information, collection of data, and communication with the world. How will librarians position themselves and their services in this world? Trust me, it won't be by taping a sign on the door of the library!

What do your Web services look like? The catalog? I'd urge libraries with a budget for technology innovation and experimentation to get an iPhone. Use it. Use it in your library. Luckily, the librarians at Topeka Shawnee Library did just that, and they posted about it at their PaperCuts blog (see figure 11):

The iPhone came out yesterday and we're so excited that we decided to test the accessibility of the library's website from the iPhone's web browser. Using his new iPhone, Daniel was able to browse the library's webpage, view the .pdf of the library's magazine connectnow, search the library's catalog and request items, request items for purchase, and search the magazine and journal databases. He can use Google Maps to get directions to the library's building at 10th and Washburn in Topeka, or e-mail a reference guestion to the librarians from his phone.⁵

Keep convergence on your radar as you plan and improve your library's technology offerings.

Content

At DIY Media, virtual community and technology expert Howard Rheingold, in examining Henry Jenkins's work, observed:

Jenkins noted that the success of Youtube as a business owes as much to amateur contributors like the Chinese Backstreet Boys as it does

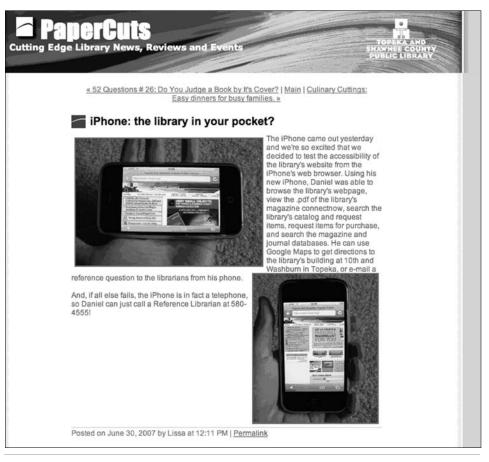


Figure 11 The iPhone on the PaperCuts blog.

to the founders-the value of a user-generated content business depends precisely on the popularity, if not the production quality, of content generated by users, and the willingness of these prosumers to alert their social networks to new cultural discoveries.6

Today we have YouTube celebrities famous for their down-home content creation with a video camera, webcam, or cell phone. Who knew that launching a blog, podcast, videocast, or some other content-producing mechanism could lead to fame and fortune in the converged world?

As far as I am concerned, tens of thousands of people who are actively creating new stuff are more interesting than millions of more passive participants.

Howard Rheingold, OCLC Symposium, ALA Midwinter Meeting, Seattle, WA, Jan. 19-24, 2007.

What does this mean for libraries?

Libraries can and should tap into this trend. Creating a place for people to come together and make something is important and much needed. It will level the playing field for access to technology. I advocate for libraries to offer community space, technology, and support for digital creation of all kinds. In my vision, podcast studios, videoediting bays and flexible, collaborative group space for work creating content will be a hallmark of future library buildings. Take a look at any number of blog applications, wiki sites, and image generators on the Web to see just how easy it is to create something new online. (A few are listed in the Resources at the end of this chapter.)

Citizen Journalism

In my Tech Trends talks, I use an example from The Church of the Customer Blog, which highlights a trip to a messy Kohl's department store that was documented and blogged via a cell phone. We've entered the age of The growth of the read/write web has also influenced strategic directions. New technologies enable anyone to create and publish content to the web. Initially, users mostly published text. However, digital cameras, video cameras, GarageBand, Flickr, YouTube, and a host of other software allow ordinary people to create a variety of content and post it to the web. This dramatically changes the types of software that libraries need to support their computing facilities. For example, the University of Minnesota has made web log software available to faculty, staff, and students. In academic libraries, this technology makes it easier for faculty to self-publish and self-archive their materials, everything from books and articles to data sets and lectures. Libraries can help promote better scholarly communication by facilitating this process—providing systems and space to store content and education for faculty on how to produce and self-publish materials.

Karen Coombs, "Planning for Now and Then," netConnect, Oct. 15, 2006, www.libraryjournal.com/article/CA6375463.html

the citizen journalist who can report from practically anywhere a cellular or wifi signal can reach. For example, Ann Arbor has a Superpatron, a library-centered adaptation of Eric von Hippel's notion of "Lead Users" Chicago Public Library now has CPL Patron, a blog dedicated to exploring the services of CPL. Author Chris Rios writes on his About Page:

I love CPL and I am constantly trying to find new and better ways to use its resources to their fullest. I have also found myself frustrated by certain aspects of its functions and services and feel that there is definitely room for improvement. My hope is that employees at CPL will read this blog and a discussion will ensue about what practices are currently working and what practices could be changed or implemented to improve services. I am also hoping that other patrons will read this site and say to themselves, "Hey! That's a good idea!" and request those services from CPL, or give CPL that pat on the back it needs every once and while. Buy your local branch librarians a gift or bake them some cookies. (It's good to be nice to your local librarian.) If you are also a CPL patron please send in your stories (good and bad) and suggestions and I'll be sure to post them up on this blog.8

Our trends certainly are feeding into each other! In the course of his citizen journalism, Rios is looking to create a conversation space for folks who use the CPL. My hope is librarians and staff of CPL would participate

At the OCLC Blog "It's All Good," Alane Wilson reported on the Top 5 trends identified by trendwatching. com, including this one:

Transparency Tyranny

As camera and video phones are becoming both ubiquitous and more powerful, reviews of anything and everything will go multimedia. The impact? Well, a picture says more than a thousand words, and a video says more than a thousand pictures ;-) EVERYTHING brands do or don't do will end up on YouTube.com, or on an undoubtedly soon to be launched YouTube-clone dedicated to product reviews."9

Here's the thing: 156 million Americans use highspeed cell phone networks that allow them to take pictures like this and post them immediately to a blog where, naturally, they can spread.

Ben McConnell, "Not-So-Secret Shopper," Church of the Customer Blog, Jan. 12, 2007, www.churchofthecustomer. com/blog/2007/01/notsosecret_sho.html

What does this mean for libraries?

I think we may see more Superpatrons and more blogs devoted to library systems all over. More reviews of libraries and library services will appear on social sites. Everything LIBRARIES do or don't could potentially wind up on a blog, photoblog, or videoblog. Cell phone cameras might be snapping or recording video. Conversations will play out among users. Hopefully, we'll even see more libraries seeking to make the conversation zone inside library cyberspace.

We're Human

This is the *social* trend. People want to make connections. One way to do that is online. People want to express their humanity. As the example of my dear old dog Jake illustrates, there is support not only in the real world of family and friends but in the online world as well. And some of these ties can be just as strong or fulfill a need at exactly the right moment.

Fred Stutzman, a researcher and student at UNC's Info Science school, argues that in 2007 we'll see social networking grow and change, especially with thriving, established sites like eBay:

As the web goes social, individuals in these communities want to meet, learn about, learn from or even date fellow members of these communities. Therefore, it makes a lot of sense for established communities to introduce social and profile aspects to their communities. First, it is a move that will get tech pundits talking, and the cluetrain folks applauding, as it embraces social and conversational aspects of community. Second, it will increase engagement between customers, therefore increasing the amount of time people will spend on the site. It also increases the amount of social capital individuals invest into their relationship with the content site, ultimately making individuals ambassadors of the brands into which they invest time.¹⁰

What does this mean for libraries?

Librarians should be very aware of what fosters community. What pulls a community together? What creates human connections online? We can blather on about technologies and tools until we're blue in the collective, conference-attending, presentation-giving face, but the key is to use the social networking tools to foster support, connection, and feelings.

The work of Howard Rheingold, Dr. Gary Burnett at Florida State University, and many other researchers who look at online community might be useful as librarians create communities via blogs, wikis, and virtual worlds like Second Life.

Openness, Sharing, & Transparency

At the Tech Trends session at the 2007 Ontario Library Association Super Conference in Toronto, John Blyberg, head of Technology and Digital Initiatives at Darien Library, Darien, Connecticut, and blogger, spoke so eloquently about openness and sharing:

Openness is the new trend. It's an open world. ... are you unable or unwilling to adapt? Sharing content, thoughts and ideas should be the norm.¹¹

I couldn't agree more. I am fascinated to watch opensource software catch on more and more in libraries. For more on this topic, see Casey Bisson's issue of *Library Technology* Reports, "Open-Source Software for Libraries."12

Openness and sharing lead to transparency. Chris Anderson, author of The Long Tail, blogged in late 2006 about "radical transparency": "Perhaps the most interesting of these [trends] is the shift from secrecy to transparency...." Anderson also addressed the "what happens in the company stays in the company" idea: "Aside from some special exemptions," he noted, "such as conferences where those employees trusted enough to go chatted guardedly with outsiders, employees were cautioned that what happened at work should stay at work. Loose lips sink ships, etc."13

Users and their knowledge have the ability to reshape library services, but libraries must first change the way they craft their services and tools so that users have a clear and open avenue on which to communicate and participate.

Michael Casey, Technology Services Division Director, Gwinnett County Public Library, e-mail interview by the author, July 5, 2007

Along the same lines, the work of David Weinberger continues to inspire and provoke my thinking. His chapter in The Cluetrain Manifesto, "The Hyperlinked Organization," speaks to libraries perfectly. Open discussions, open planning, and open organizations will hopefully be the mantra of libraries that want to be the best at what they do. As I wrote a few months ago:

This isn't Vegas folks. And it certainly isn't the Pentagon. The fact that we are building collections and creating services for our users means we should be letting these folks know what we are doing and how we are spending their money. If you are doing it well, you can tell your users a mighty fine story of what benefits and value the library offers. If you are afraid to tell them, you have a problem. Go back and rethink please. I'll wait right here.14

What does this mean for libraries?

Open, honest communication should be the preferred method of sharing information with staff and users. Open data and open systems will allow users to utilize what they want from the library in ways that might surprise us. As Jenny Levine noted in the foreword and as Professor Mike Wesch so usefully illustrated in his Web 2.0 video, we need to rethink privacy.15

Participation

Many of my Library 2.0 talks are subtitled "Planning, People & Participation" because although all three are key, participation makes the true difference. Folks have found that on the Web they can participate in creating content that enhances our lives: rating hotels, noting fabulous dining places, sharing book reviews, etc. The best libraries will recognize participation should carry over into their Web presence as well. A 2.0 tool, such as tagging, allows folks to participate in shaping the library's resources.

For one example, don't miss the excellent post by Ryan Deschamps, blogger at The Other Librarian, entitled "My Top-Ten Library 2.0 'No-Brainers,'" which includes this wisdom:

Have a public blog and allow comments.

Why is it L2?

Because it invites participation, fair and simple.

Why would my users want it?

Lots of reasons, including but not limited to 1) wanting and input on their library 2) getting answer to questions 3) getting to read interesting comments and how they are responded to 4) feeling like your website is not an automaton but that there are actually people running the show and 5) engaging other library-people in a discussion about their favorite place.

Moderate it all you want, but we are at the age where you need a blog with commenting power. 16

What does this mean for libraries?

Besides making online participation possible, we should also provide ways for library users to participate physically within the library: planning, focus groups, decision making, etc. People who are encouraged to participate will care about the library when funding issues appear!

Experience

I feel fortunate that Michael Casey and I have had many opportunities to discuss Library 2.0 in our Library Journal column and via the blogosphere. My favorite parts of those discussions have been about the emotional. personal aspects of Library 2.0, which include:

• Library 2.0 encourages the heart. As we reach out to our users, we remember all of the folks we serve. We create experiences for them.

- Library 2.0 will be a meeting place, either online or in the physical world, where the emotional needs of users will be fulfilled through entertainment, information, and the ability to add their own creations to the Long Tail of content.
- Library 2.0 is human. Users will see the face of the library, no matter how they access its services. Librarians will guide them via electronic methods as well as in person. Versed in the social tools, able to roll with each wave of change, these librarians will encourage and educate future users.

What types of experience do you offer? What types do you seek out? Recently, Stephen Abram pointed out Stephanie Weaver's "8 Steps to Better Experiences" at his blog, Stephen's Lighthouse:

- 1. Invitation
- 2. Welcome
- 3. Orientation
- 4. Comfort
- 5. Communication
- 6. Sensation
- 7. Common sense
- 8. Finale¹⁷

How well do the in-person and online experiences we offer our users shape up? What barriers are you putting up to a good experience for library users? Online, we'll see more people seek out experience as part of their Web surfing. At his blog Unit Structures, Fred Stutzman looked ahead at what 2007 might bring in the realm of social networking. He forecast a vision of community engagement via the Web:

Community will emerge around shared experience. YouTube is a shared experience. You send me a video, I watch it, we talk about it. Millions of people of all ages do this every day. The social web is one of shared experiences, and video is a prime example of this phenomenon. Over the next year, we'll find lots of new ways to have shared social experiences, and there's a good chance that rich media will be centric to these experiences. 18

Do you seek experience with new technologies and new ways of providing service? It's a good way to learn and ponder how new technologies might improve library services and how new communities might benefit from a library presence.

What does this mean for libraries?

Hand in hand with experience, comes PLAY. I urge librarians exploring the 2.0 world to make the experience fun.

Redefining LIS Jobs

At ALA TechSource, I opened a series on 2.0 jobs with:

Libraries may want to evaluate and redefine certain jobs as we move more and more into a usercentered, user-driven environment, in which primary duties may include creating online tools for collaboration and creation, developing innovative programs, and serving as instructors and "strategy guides" for users. The dilemma: What duties and processes need to roll off job descriptions in order to make room for such tasks? What does this mean for our institutions? (Michael Stephens, "On the 2.0 Job Description: Part 1." ALA TechSource blog, March 21, 2006, www.techsource.com/blog/2006/03/on-the-20 -job-descriptionpart-1.html)

We have always realigned library jobs to reflect changes in technology and library services, but this time I think we are seeing an integration of technology, innovation, and newer ways to structure library jobs for the future. Some libraries are creating teams or new departments to look at trends and emerging technologies and to guide future planning. Others are designating the library Web presence as a "virtual branch" and staffing it as such. The library Web site can be relegated to the domain of one Web librarian or the IT people in the basement; but in a 2.0 world, the library Web site should be an online extension of the library's mission and vision—and dedication to service.

Meg Canada, senior librarian at Hennepin County Library, told me about her newly formed department. Hennepin County Library's Center for Innovation and Design has three areas of focus: service design, capital projects, and the application of innovative and transformative ideas. Canada stated, "My role as Senior Librarian for Innovation and Design is to develop a long-term service plan, communicate with internal stakeholders, and develop building programs for capital projects" (Meg Canada, interview by the author, Feb. 21, 2007).

For more proof of the shift, look no further than this post, "Our Transformation Continues," by McMaster Univesity Librarian Jeff Trzeciak:

The McMaster Library is going through a very exciting transformation and we're looking for creative, innovative risk-takers who are eager contribute to our process and to the transformation of our profession.

Digital Strategies Librarian

McMaster University Library is seeking an innovative and technologically knowledgeable librarian who will provide vision and leadership in the development of a digitization strategy or McMaster University Libraries and will lead projects, which will develop technologies supporting the delivery of digital library services.

Digital Technologies Librarian

McMaster University Library is seeking an innovative and technologically knowledgeable librarian to manage support for the Horizon ILS and local systems at McMaster University Library by developing a responsive, service-oriented structure that will support library users and staff in their use of library systems. The position will contribute to the ongoing development of quality electronic information systems in a rapidly changing environment to meet present and future teaching, study, and research needs of the University by implementing innovative, new technologies.

Teaching and Learning Librarian

McMaster University Libraries is seeking a creative, innovative and experienced librarian to lead the growth and development of its dynamic instruction and information literacy program (Jeff Trzeciak, "Our Transformation Continues," McMaster University Library blog, Jan. 20, 2007, http://ulatmac.wordpress.com/2007/01/20/our -transformation-continues)

I believe we need to teach some serious trend spotting and technology planning in LIS education. How do we implement and take into account budget, staff, hardware, software, promotion, and buy-in? How do we offer the new tech to users? How do we market services in a 2.0 world? Luckily, we can observe libraries like the one at McMaster to see what trails are being forged for the future.

Another posting for an Emergent Technologies Librarian at Eastern Michigan University included these key duties: "Explore, evaluate, and encourage the deployment of emergent technologies to engage library users and staff in new ways" ("Emergent Technologies Librarian," Eastern Michigan University Web site, www.emich.edu/public/aa/ahr/F0732.htm).

For more on the 2.0 job description, please see my posts on the ALA TechSource blog (listed in the Resources box).

Discover new things. Try Second Life for the experience and to FLY, folks! It's just plain fun. Ponder how you'll play this coming year. Will it be your library's Learning 2.0 program? Will it be shooting some fun pictures for the library Flickr account? Is it building and participating in a virtual community that lives on your library server devoted to a love of reading, film group or knitting? Whatever it is-HAVE FUN.

The OPAC Rebooted

One trend to very aware of is the innovations within the library catalog, including the addition of social features. Since my last issue of *Library Technology Reports*, the library world has seen advancements in three notable projects: the Social OPAC at Ann Arbor District Library (AADL), the award-winning WP OPAC (now known as Scriblio), and the use of Library Thing, an SNS devoted to cataloging one's personal library of books and media, into the library setting.

AADL's SOPAC

The AADL catalog is now enhanced to allow users a higher level of engagement and interactivity than ever before. John Blyberg described the Social OPAC (SOPAC) in a blog post at Blyberg.net: "It's basically a set of social networking tools integrated into the AADL catalog. It gives users the ability to rate, review, comment-on, and tag items."19 Visit the post (listed in the Resources box) for a screencast highlighting the features of this revolutionary upgrade. Interested librarians and technologists can download Blyberg's catalog enhancements from Blyberg.net.

Scriblio

Scriblio, formerly WPopac and discussed in my previous issue of Library Technology Reports, is "an award winning, free, open source CMS and OPAC with faceted searching and browsing features based on WordPress," according to the About page.²⁰ Created by Casey Bisson, information architect for Plymouth State University's Lamson Library, the application is also being tested by Cook Memorial Library, in Tamworth, New Hampshire, and at Beyond Brown Paper, a photo archive site from the Brown Manufacturing Company in northern New Hampshire. Bisson won the Mellon Award for Technology Collaboration in late 2006. There is more information in the PSU press release (listed in the Resources box).

In his work on the project, Bisson stresses that library systems should be usable and easily remixed by future users who are accustomed to mashing up their own content in ways that suit them: "The crisis in library systems arose because the people who build them and those who pay for them couldn't imagine them in any other way. Open, remixable systems will allow patrons of tomorrow the opportunity to build the information solutions we can't now imagine."21

LibraryThing

LibraryThing is an online community that lets users catalog their own collections of books. Use of the site is free for up to 200 catalogued items; users can catalog an unlimited number of books for \$10 a year or \$25 for a lifetime. Currently, there are over 238,000 members who have cataloged over 16,000,000 books. The About page at LibraryThing states:

LibraryThing is a full-powered cataloging application, searching the Library of Congress, all five national Amazon sites, and more than 80 world libraries. You can edit your information, search and sort it, "tag" books with your own subjects, or use the Library of Congress and Dewey systems to organize your collection.²²

Kathy Ishizuka's article in School Library Journal from October 2006 noted that the site had more than five million titles cataloged by its users-making LibraryThing "the 34th largest library in the U.S., bigger than the collection of the University of Virginia."23

LibraryThing, like the other innovations in this section, is also a social site that affords users the chance to make connections with each other. Users can find out the most common tags for books in their collections, subscribe to RSS feeds, browse other people's libraries, read or write a review, or join discussion groups, such as "Librarians Who LibraryThing." Tag clouds, a Zeitgeist page, user reviews, and reader ratings round out the features that make LibraryThing a thriving community of the personal libraries of its users (see figure 12). "Because of this intimacy, LibraryThing can also connect likeminded readers-a sort of MySpace for bookworms. But the object is always to find more books, not to kindle online relationships or cliques," reported Aaron Rutkoff in the Wall Street Journal. 24 Rutkoff also interviewed Library Thing creator Tim Spaulding for the piece, which promoted LibraryThing to an even wider audience.

What does this mean for libraries?

What do all of these innovations have in common? Their use of the 2.0 tool set-tags, comments, and more-and their open, participatory feel point to what our future catalogs should do. John Blyberg's "Always Pushing Information" in *Library Journal* speaks to what the future ILS should be:

Libraries still pay up to (and sometimes more than) \$500,000 for their automation systems

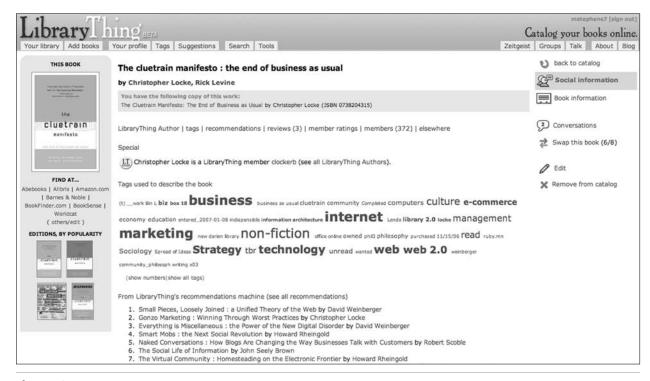


Figure 12 The LibraryThing page for The Cluetrain Manifesto.

and devote hundreds of thousands of employee hours to make the data inside work for them. Are we truly getting an appropriate return on our investment if the data that we own is not available to us when and where we want it? If we were to liken our information architecture to our physical architecture, we would find the spaces are outdated and no longer work for us as efficiently as we'd like. Here in Darien, CT, we're building a new library that our director, Louise Berry, likes to describe as "timeless." What she means is that the building has been designed to suit its time and place, despite any changes within the field. What we need from our vendors is timeless software.25

What You Can Do Now

Here are some steps you can take now to begin using the ideas in this chapter:

• Use this list of trends to jump-start a staff meeting about emerging technologies. Talk about what people are doing with the Web, their devices, and their time. Look for examples in your community, campus, school, or organization. Then look for ways to participate!

- Form an emerging technology committee to make this work ongoing. Rotate all levels of staff on and off the group to give a diversity of perspectives and voices. Blog meeting minutes, action items, and next steps.
- Read outside the field to monitor trends: Wired, Technology Review, Business 2.0, and Fast Company might be useful periodicals to circulate to the emerging tech team.
- Start a Learning 2.0 program. (See chapter 8 for more on Learning 2.0.)

Resources

AADL.org Goes Social www.blyberg.net/2007/01/21/aadlorg-goes-social

Ann Arbor's Superpatron www.superpatron.com

Beyond Brown Paper http://beyondbrownpaper.plymouth.edu/browse

Blyberg.net Files for Download www.blyberg.net/files

CPL Patron http://cplpatron.crios.info

The Hyperlinked Organization www.cluetrain.com/book/hyperorg.html

ImageChef www.imagechef.com

Image Generator Links www.imagegenerator.org

iPod Billboard Sign Generator www.redkid.net/generator/billboard/purplesign.php

Librarians Who LibraryThing www.librarything.com/groups/librarianswholibrar

LibraryThing http://www.librarything.com

On the 2.0 Job Description, Part 1 www.techsource.ala.org/blog/2006/03/on-the-20-job -description-part-1.html

On the 2.0 Job Description, Part 2 www.techsource.ala.org/blog/2006/04/on-the-20-job -description-part-2-lis-students-in-a-20-world.html

On the 2.0 Job Description, Part 3 www.techsource.ala.org/blog/2006/12/desperately -seeking-the-adaptive-librarian-on-the-20-job -description-part-3.html

PSU's Casey Bisson Wins Mellon Award www.plymouth.edu/thirdtier/fullstory.phtml ?number=5224

Scriblio http://about.scriblio.net

Ten Techie Things for Librarians 2006 http://tametheweb.com/2006/02/ten_techie_things _for_libraria_1.html

Twelve Techie Things for Librarians 2005 http://tametheweb.com/2005/01/twelve_techie _things_for_libra.html

Warning Label generator www.warninglabelgenerator.com

Notes

- 1. Karen Schneider, "Pets, Social Software, and Unconditional Love," Free Range Librarian, June 18, 2007, http://free rangelibrarian.com/2007/06/18/pets-social-software-and -unconditional-love (accessed July 11, 2007).
- 2. Convergence page on the MIT Convergence Culture Consortium Web site, www.convergenceculture.org/ aboutc3/convergence.php (accessed July 11, 2007).
- 3. Ravi Purushotma, Review of Convergence Culture: Where Old and New Media Collide, Aug. 14, 2006, on the Slashdot Web site, http://books.slashdot.org/article .pl?sid=06/08/14/1315257 (accessed July 11, 2007).
- 4. Glenn Fleischmann, "Analysis: iPhone and the Emergence of Convergence," Feb. 2, 2007, on the MacWorld Web site, www.macworld.com/news/2007/02/02/convergence/ index.php, (accessed July 11, 2007).
- 5. "iPhone: The Library in Your Pocket?" PaperCuts, June 30, http://papercuts.tscpl.org/2007/06/iphone_the _library_in_your_poc.html (accessed July 11, 2007).
- 6. Howard Rheingold, "'From YouTube to Youniversity'-Henry Jenkins at ACC, Part Two," DIY Media Weblog, Jan. 25, 2007, http://diy.video24-7.org/2007/01 (accessed July 11, 2007).
- 7. Eric von Hippel, "Lead Users: A Source of Novel Product Concepts," Management Science 32, no. 7 (July 1986):
- 8. Christopher Rios, "About CPL Patron," Chicago Public Library Patron, http://cplpatron.crios.info/about-cpl-patron (accessed July 11, 2007).
- 9. Alane Wilson, "Top 5 Consumer Trends," It's All Good, Jan. 8. 2007, http://scanblog.blogspot.com/2007/01/top -5-consumer-trends.html (accessed July 11, 2007).
- 10. FredStutzman, "SocialNetworkingin2007," UnitStructures, Jan. 2, 2007, http://chimprawk.blogspot.com/2007/01/ social-networking-in-2007.html (accessed July 11, 2007).
- 11. John Blyberg, "Top Tech Trends (session, Ontario Library Association's Super Conference 2007, Toronto, Ontario, Jan. 31-Feb. 3, 2007).
- 12. Casey Bisson, "Open-Source Software for Libraries," Library Technology Reports 43, no. 3 (May/June 2007).
- 13. Chris Anderson, "In Praise of Radical Transparency," The Long Tail, Nov. 26, 2006, www.longtail.com/the_long _tail/2006/11/in_praise_of_ra.html (accessed July 11, 2007).
- 14. Michael Stephens, "The Hyperlinked Organization: Radical Transparency, Crummy Meetings, and Micromanagement, ALA TechSource blog, Nov. 30, 2006, www.techsource . ala. org/blog/2006/11/the-hyperlinked-organization-radical-transparency-crummy-meetings-micromanagement .html (accessed July 11, 2007).
- 15. Michael Wesch, "Web 2.0 . . . The Machine Is Us/ing Us," Jan. 31, 2007, on the YouTube Web site, www.youtube .com/watch?v=6gmP4nk0EOE (accessed July 10, 2007).
- 16. Ryan Deschamps, "My Top-Ten Library 2.0 'No-Brainers' for Public Libraries," The Other Librarian, Jan. 19. 2007,

- http://otherlibrarian.wordpress.com/2007/01/19/my -top-ten-library-20-no-brainers-for-public-libraries (accessed July 11, 2007).
- 17. Stephanie Weaver, "8 Steps to Better Experiences, Part 1," Experienceology, Feb. 18, 2007, http://experienceology .blogspot.com/2007/02/8-steps-to-better-experiences.html (accessed July 11, 2007); quoted by Stephen Abram, "The 8 Experience Steps," Stephen's Lighthouse, Feb. 26, 2007, http://stephenslighthouse.sirsidynix.com/archives/2007/02/ the 8 experienc.html (accessed July 11, 2007).
- 18. Stutzman, "Social Networking in 2007."
- 19. John Blyberg, "AADL.org Goes Social," blyberg.net, Jan. 21, 2007, www.blyberg.net/2007/01/21/aadlorg-goes -social (accessed July 26, 2007).
- 20. "About Scriblio," Scriblio Web site, http://about.scriblio .net/about (accessed July 26, 2007).
- 21. Casey Bisson, "Usability, Findability, and Remixability, Especially Remixability," MaisonBisson.com blog, April

- 17, 2007, http://maisonbisson.com/blog/post/11614/ #usability-findability-and-remixability-especially-remixability (accessed July 26, 2007).
- "About LibraryThing," on the LibraryThing.com Web site, www.librarything.com/about (accessed July 26, 2007).
- 23. Kathy Ishizuka's article, "A Book Lover's MySpace," School Library Journal, Oct. 1, 2006, available online at www.schoollibraryjournal.com/article/CA6376092.html (accessed July 26, 2007).
- 24. Aaron Rutkoff, "Social Networking for Bookworms," The Wall Street Journal, June 27, 2006, available online at http:// online.wsj.com/public/article/SB115109622468789252 -i8U6LIHU7ChfgbxG1oZ_iunOIWE_20060727.html (accessed July 26, 2007).
- 25. John Blyberg, "Always Pushing Information," Library Journal netConnect, July 15, 2007, www.libraryjournal .com/article/CA6453423.html (accessed July 26, 2007).