

## New Technologies in Libraries June 2007

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Definitions adapted from <http://en.wikipedia.org> and <http://www.webopedia.com>. For brevity's sake, I am including the most commonly accepted definitions of each technology - not every possible variation of each term. I also describe common library applications, and where available, provide an example of a *Best Practice* library implementation.

### Mobile

Mobile refers to the provision of information and services through a portable handheld device such as a PDA (personal digital assistant), smart phone, ipod or other tool that delivers sophisticated computing capabilities in a small mobile package. Mobile access allows for staying in touch and accessing information on-the-go, from anywhere, un-tethered to a desktop workstation. Typical mobile tools include personal information management such as calendar and address book, document storage, mp3 player, digital camera, image viewer, Web browser, text messaging, and voice communications.

Library applications of going mobile include providing mobile accessible web pages, including the catalog, ebook collections, and databases. Especially hot right now is mobile search – getting answers to ready reference type questions at the point of need, from a mobile device. In many cases this means turning to traditional search engines such as Google and AOL, but using them to find a specific answer, not get a long list of links. Typical mobile requests include ready reference answers such as definitions, phone numbers, stock prices, and sport scores, as well as geographically contextual information, such as nearby movie theaters and show times.

*GottaBeMobile* <http://www.gottabemobile.com>

*The Handheld Librarian: (Lori Bell et al)* <http://www.handheldlib.blogspot.com>

*4info* <http://www.4info.net>

*Best Practice: Ball State University Libraries mobile site*  
<http://www.bsu.edu/libraries/mobile/>

*Best Practice: Minneapolis Public Library: online catalog optimized for small screen*  
<http://mplwebcat.mplib.org/airpac/jsp/airpacIndex.jsp>

### Instant Messaging/Text Messaging

Instant messaging (IM) is a type of communications service that enables you to have real time text-based conversations with another individual. Generally, both parties in the conversation see each line of text right after it is typed (line-by-line), thus making it more like a live telephone conversation than exchanging letters (as email is). Popular instant messaging services include AOL Instant Messenger, Yahoo! Messenger, MSN. Meebo and Trillian supports multiple services from within one interface. Text messaging is instant messaging on the go - sending short messages from one mobile device to another. Library applications for texting and messaging include internal communications - especially between service desks, tech support, and digital reference – as well as handling informational questions from patrons.

- Instant Messaging/Chat – computer to computer
- Text Messaging/SMS (short message service) – handheld (phone etc) to handheld

*IM Me, Aaron Schmidt & Michael Stephens, Library Journal, 4/1/2005 Includes IM Best Practices and list of libraries doing IM* <http://www.libraryjournal.com/article/CA512192>

*Training staff on IM, Michael Stephens*  
[http://tametheweb.com/2005/04/training\\_im\\_a\\_ready\\_to\\_go\\_modu.html](http://tametheweb.com/2005/04/training_im_a_ready_to_go_modu.html)

*Aaron Schmidt's Blog Walking Paper entries on Instant Messaging*  
<http://www.walkingpaper.org/index.php?tag=instant-messaging>

## **Blogs**

Short for Web log, a blog is a web page driven by an easy to use content management system (CMS) that automatically time stamps each entry, orders them in reverse chronological order, provides static permalinks to each entry, and auto-archives all entries. Blog content can run from personal diaries to political campaigns. Many weblogs enable visitors to leave public comments, which can lead to a community of information; others are non-interactive. Many blogs include blogrolls, i.e., links to other blogs which the owner reads, and/or have trackback, which allows one blog to link to a related entry in another blog. In their best iterations, blogs engage readers and build a virtual community around a particular topic or interest. Library applications include promoting new resources, events, services, displays, FAQs; interactive book clubs discussions; as well as internal project management and communications, such as reference desk happenings.

*Library Blogs* <http://liswiki.org/wiki/Weblogs>

*BlogBib - An Annotated Bibliography on Weblogs and Blogging, with a Focus on Library/Librarian Blogs* <http://blog-bib.blogspot.com>

*Best Practice: The Saint Joseph County Public Library "SJCP L Lifeline blog"*  
<http://www.libraryforlife.org/blogs/lifeline/index.php>

## **Wikis**

*Wiki wiki* means "quick" in Hawaiian, and a wiki is a fast and easy way to publish collaborative web content. Similar to a blog in structure and logic, most wikis allow anyone to edit, delete or modify content that has been placed on the Web site using a browser interface. In contrast, a blog does not allow visitors to change the original posted material, only add comments to the original content. A wiki is a Web site comprised of the perpetual collective work of many authors. The term wiki can refer to either the Web site or the software used to create the site.



*Best Practice: Library Success: A Best Practices Wiki*  
<http://www.libsuccess.org>

*Best Practice: University of Connecticut Libraries' Staff Wiki*  
[http://wiki.lib.uconn.edu/wiki/Main\\_Page](http://wiki.lib.uconn.edu/wiki/Main_Page)

*Best Practice: Butler University Libraries' Reference Wiki*  
[http://www.seedwiki.com/wiki/butler\\_wikiref](http://www.seedwiki.com/wiki/butler_wikiref)

*Best Practice: Ohio University Libraries Biz Wiki*  
[http://www.library.ohiou.edu/subjects/bizwiki/index.php/Main\\_Page](http://www.library.ohiou.edu/subjects/bizwiki/index.php/Main_Page)

## RSS

Short for Really Simple Syndication, Rich Site Summary or RDF Site Summary, RSS is an XML format for syndicating Web content. Syndicated content may include events listings, news stories, headlines, or project updates. RSS is most often used to provide snippets of information, which contain short descriptions of web content with a link to the full version of the content. This snippet is delivered as an XML file called an RSS feed, RSS stream, or RSS channel. An orange rectangle with the letters XML () is often used on a blog or web site as a link to a site's RSS feed or the syndication symbol . RSS feeds need to be read in a reader or aggregator, such as the free web-based program such as Bloglines. RSS pushes content to a user's reader, configured with the user's preferences, saves users from having to repeatedly visit favorite websites to check for new content or be notified of updates via email. Library applications include current news on events, displays, services, new resources, books out/overdue, subject guides.

*RSS4lib Feeds Innovative ways libraries use RSS*  
<http://www.rss4lib.com>

*Best Practice: Marin County Free Library*  
<http://www.marincountyfreelibrary.blogspot.com>

## Podcasting

In its true definition, podcasting is similar in nature to RSS, in that it allows users to subscribe to a set of audio feeds from syndicated Web site content, that get pushed to the user. Feeds are intended to be listened to on demand using an iPod or other mp3 player. The format used for podcasting is RSS 2.0 with enclosures. Often, however, the term podcast is now used to describe any electronic audio content, even a one time download. Vcasts or vodcasts (video) are also available, as are screencasts – screen captures for multimedia demos and instruction. Library applications include lectures, tours, how-to guides, book and movie reviews.

*Creating a Library Podcast With a Unique Voice, Chris Kretz, Dowling College*  
<http://www.higheredblogcon.com/index.php/learning-to-speak-creating-a-library-podcast-with-a-unique-voice>

*Best Practice: Podcast.net directory listing for "library"* <http://www.podcast.net/tag/library>

*Best Practice: Cheshire Public Library Podcast*  
<http://www.cheshirelib.org/teens/cplpodcast.htm>

## You-Tube

YouTube, part of the Google family, is a free video sharing Web site which lets users upload, view, and share video clips. Content can be uploaded in several common-file formats (such as .mpeg and .avi). YouTube automatically converts them to Flash Video and makes them available for online viewing. Flash doesn't require that users have a separate video player, like Windows Media Player or Realplayer, and allows for higher video quality in a smaller file size, improving speed. They can now watch decent video right within a web page, practically instantly. YouTube's official policy prohibits submission of copyrighted material, and limits most content to 10-minutes. Each video is accompanied by the full HTML markup for linking to it and/or embedding it easily within another page. These simple cut-and-paste options are popular particularly with users of social/networking sites. The wide variety of site content includes movie and TV clips, music videos, and amateur content such as videoblogging. Libraries are posting videos to YouTube for marketing, instruction, entertainment and more.

*YouTube* <http://www.youtube.com>

*Listing of Library Offerings on YouTube*  
<http://www.austincc.edu/tashley/YouTubeLibraries.htm>

*Best Practice: Georgia Tech Library Orientation by Brian Mathews*  
<http://www.youtube.com/watch?v=bsuGtgoKhpM>

*Best Practice: St. Joseph County Public Library Staff Day*  
[http://www.youtube.com/watch?v=vrtYdFV\\_Eak](http://www.youtube.com/watch?v=vrtYdFV_Eak)

## **Social Bookmarking**

Takes the old concept of bookmarks management (stored on a server not a local desktop, allowing for access to your bookmarks from any computer anywhere), and incorporates advanced capabilities to add keywords and metadata, and to share this information with others. Social bookmarking allows users to save and categorize a personal collection of bookmarks. Anyone may see the bookmarks that have been saved by others and add them to their own collection. It allows you to easily add sites you like to your personal collection of links, to categorize those sites with keywords, and to share your collection not only between your own browsers and machines, but also with others.

*Excellent comparison of features of major players*  
[http://www.irox.de/file\\_download/3](http://www.irox.de/file_download/3)

*Furl* <http://www.furl.net/index.jsp> (search library and go from there...)

*Delicious* <http://del.icio.us> (search library and go from there...)

## **Folksonomy / Tagging**

Taxonomy is from "taxis" and "nomos" (from Greek). *Taxis* means classification. *Nomos* (or *nomia*) means management. *Folks* are ordinary people. So folksonomy means ordinary people's classification management. Folksonomy is a term for the practice of collaborative categorization using freely chosen keywords. More colloquially, this refers to a group of people cooperating spontaneously to organize information into categories, noteworthy because it is almost completely unlike traditional formal methods of faceted classification (e.g. Library of Congress). Since the organizers of the information are usually its primary users, folksonomy produces results that more accurately reflect the population's conceptual model of the information. Examples of online folksonomies include social bookmarking sites such as del.icio.us; photo-sharing site Flickr; academic article sharing sites CiteULike and Connotea. Also called "tagging" – applying tags, or keywords, or metadata to any set of information.

*PennTags* <http://tags.library.upenn.edu>

*IA Summit Folksonomies Panel presentations*  
[http://atomiq.org/archives/2005/03/ia\\_summit\\_folksonomies\\_panel.html](http://atomiq.org/archives/2005/03/ia_summit_folksonomies_panel.html)

*Social Bookmarking Tools (I): A General Review, Tony Hammond, Timo Hannay, Ben Lund, and Joanna Scott* <http://www.dlib.org/dlib/april05/hammond/04hammond.html>

## Social Networking

Social software promotes communication, connections and communities online. It is generally considered to be "bottom-up" community development, in which membership is voluntary, reputations are earned by winning the trust of other members, and the community's mission and governance are defined by the community's members themselves. Social network services allow people to come together online around shared interests or causes. For example, some sites provide dating services where users will post their personal profiles, location, age, gender, etc, and are able to search for a partner. Most popular examples are facebook, friendster, myspace and ning.

*MySpace*

[http://www.myspace.com/denver\\_evolver](http://www.myspace.com/denver_evolver)

*Facebook and MySpace: Pros and Cons for Libraries*

<http://www.walkingpaper.org/ei.pdf>

*Best Practice: All Entries for libraries at MySpace*

<http://www.google.com/search?q=+site:www.myspace.com+library&hl=en>

## Mash-Up

The term mashup refers to a new breed of web applications that seamlessly mix at least two different services from different Web sites. The term mash-up comes from the hip-hop music practice of mixing two or more songs. This capability to mix and match data and applications from multiple sources into one dynamic entity is considered by many to represent the promise of the Web service standard (also referred to as on-demand computing). Mashups are created by hackers and programmers (typically on a volunteer basis). Much like blogs revolutionized web publishing, mashups are revolutionizing web development, by allowing anyone to combine existing data from sources like eBay, Amazon, Google, Windows Live and Yahoo in innovative ways. They require minimal technical knowledge and thus custom mashups are sometimes created by unlikely innovators, combining available public data in new and creative ways. While there are many useful mashups, others are simple novelties or gimmicks, with minimal practical utility.

*Mashup Examples list from Wikipedia*

[http://en.wikipedia.org/wiki/Mashup\\_%28web\\_application\\_hybrid%29#Examples\\_of\\_Mashups](http://en.wikipedia.org/wiki/Mashup_%28web_application_hybrid%29#Examples_of_Mashups)

*Best Practice: Denver Public Library: branch locations Google Map style*

[http://www.denverlibrary.org/locations\\_hours/](http://www.denverlibrary.org/locations_hours/)

*Best Practice: Libraries 411*

<http://www.libraries411.com/Ylibrarymaps.php?lat=41.755464&lng=-71.456620&zp=02910&zpllat=41.7750&zplng=-71.4355&dist=1.7>

## Second Life

Second Life (SL), created by Linden Lab, is a subscription-based 3-D virtual world. While it has grown out of online gaming technologies, SL is more of an alternate universe than a game. Users – called “residents” of the SL “world” – download the SL software program to their computer. Residents create one or more avatars – virtual representation of themselves - which can be human and look like the real person it represents, or be any other age, gender, ethnicity, or even be an animal, cartoon character or science fiction creation. Residents use their keyboard to move their avatar around the world, through walking, flying or even teleporting to distant locations. Different islands focus on different content specialties. Interactions with other residents can be through viewing their profile, private instant messaging, text chat, voice chat, animated gestures and more. Creating a fancier avatar (e.g. wings, cartoon character), getting specialized accessories for your avatar, building a house, or creating any other object requires technical expertise, or that you buy it from someone else in Second Life using the local currency, Linden Dollars (L\$). In the past year, over 100 universities have initiated learning activities in SL.

Libraries are also making an appearance. The largest library initiative is the Illinois regional Library Alliance’s Second Life Library on Info Island. Book discussions, training sessions, and other programs are offered to the virtual residents. You can search google, get assistance from a librarian, and browse a reference collection. The population of Second Life surpassed 3 million residents in May 2007.

*Second Life (SL)* <http://secondlife.com>

*Best Practice: InfoIsland: Second Life Library 2.0 Blog* <http://infoisland.org>

*Best Practice: Bradley University Library in SL*  
<http://slurl.com/secondlife/Info%20Island%20II/106/88/25>

## Web 2.0 / Library 2.0

Web 2.0 puts the “we” into “web.” Web 2.0 generally refers to a second generation of services available on the web that let people collaborate and share information online. In contrast to the first generation, static web, 2.0 is interactive. Web 2.0 is a philosophy, encompassing a number of ideas; it is not a specific technology. Similarly, Library 2.0 is a model for service that reflects a transition within the library world in the way that services are delivered to library users. Library 2.0 attempts to harness the library user in the design and implementation of library services by encouraging feedback and participation. Web 2.0 and Library 2.0 represent an attempt to improve service through taking advantage of the collective intelligence. Many of the concepts above are part of Web 2.0/Library 2.0 (blogs, wikis, podcasts, folksonomies, tagging, etc).

*What Is Web 2.0: by Tim O'Reilly* <http://www.oreillynet.com/lpt/a/6228>

*Stephen Abram "Web 2.0 – Huh?! Library 2.0, Librarian 2.0" Information Outlook Online December 2005* [http://www.sirsi.com/Pdfs/Company/Abram/InfoTech\\_Dec2005.pdf](http://www.sirsi.com/Pdfs/Company/Abram/InfoTech_Dec2005.pdf)

*Library 2.0 Ning* <http://library20.ning.com>

*Library 2.0 Squidoo* <http://www.squidoo.com/library20>

*Best Practice: Hennepin Public Library (blogs, myspace, rss, podcasts and much more)*  
<http://www.hclib.org>