

# Top Ten Technologies for Academic Libraries

Eliot Boden, Elisabeth Lomax, Kelley Martin, Aaron Robb



## BrowZine : Scholarly Journal App

<http://thirdiron.com/browzine-ipad-app/>

BrowZine is a mobile app that enables students, faculty, and researchers to keep informed of the latest developments in their fields by browsing and reading scholarly journal articles on their mobile devices. Available for both iOS and Android tablets, BrowZine enables users to save, annotate, and export articles to share with colleagues. BrowZine also interfaces with cloud services such as Zotero, Mendeley, and Dropbox to support academic collaboration (Third Iron, 2012).

Electronic databases are designed for finding and retrieving individual articles, not browsing complete issues of academic journals. Articles from the same issue must be searched individually and are often located in separate databases. As a result, valuable content often goes unread because it is a challenge to discover. BrowZine solves this problem by collecting articles from multiple databases and presenting them as a complete issue of a journal on a digital newsstand (Seguin, 2012).

By partnering directly with journal publishers, BrowZine provides up-to-date, non-embargoed content that is automatically uploaded to a user's customized digital newsstand as it becomes available (Seguin, 2012). By delivering content straight to users, libraries with BrowZine can facilitate serendipitous discovery of scholarly articles that otherwise may not have been located in the databases, thereby increasing usage statistics and adding significant value to costly electronic resource packages (Third Iron, 2012).

## PB Works : Online Collaboration Space

<http://pbworks.com/>

PBworks is a cloud-based group workspace that is widely used in business and education. It's one of the largest online collaboration services, with over 3 million active users around the world working on upwards of 15 million pages and files (Hoffman, 2010). Designated Software-as-a-Service (SaaS), PBworks is completely web-based and can be accessed from any computer with an Internet connection. This is especially useful for work groups that are dispersed over a wide geographic area, such as distance learners (PBwiki, Inc., 2012).

Core wiki functions such as editing, annotating, and publishing pages are supported, as are multimedia features such as uploading and sharing files. Features that assist in managing workflow include email change notifications, revision history, IM/chat, and live edit sharing (Hoffman, 2010). Security settings also enable administrators to set user privileges at the workspace, folder, and page levels, as well as restrict unauthorized access (PBwiki, Inc., 2012). Workspaces can also be branded by changing the color and adding a library logo.

Academic librarians can use a PBworks account to support technology classes, assist research groups, provide library use instruction, and build a library intranet page (PBwiki, Inc., 2012). Basic workspaces are available free for higher education and include privileges for up to 20 users, 5 workspaces, and 20MB of storage per workspace. Premium workspaces with advanced security and access controls are available for a \$99 annual fee. Campus Edition, with access for up to 1,000 users, 2GB of storage per workspace, and an account management dashboard, is available for \$799 per year (PBwiki, Inc., 2012).

## Web-Scale Discovery : Single Search Box

In the past, a library's resources were limited to its physical collection of books, journals, and periodicals. Today, libraries are said to operate in the distributed environment, which offers patrons a staggering number of potential sources in which to find information; paradoxically, this has made it more difficult for untrained users to locate relevant materials. "Knowing where to start or which database or catalog to choose is not always easy" (Buck, 2012).

Enter Discovery Services, which enable users to search the breadth of a library's resources at once using a keyword search. Users input search terms via a "single search box that addresses all the many different repositories that represent the library's collections," including "licensed scholarly publications combined with locally held content" (Luther, 2011). This is necessary since user "expectations for ease of use are increasingly driven by standards set for search by the commercial market" (Moore, 2012). Therefore, most discovery services attempt to mimic the look and feel of popular commercial web search engines such as Google, Yahoo!, and Amazon.

Discovery Services frequently use faceted navigation, which “enables users to filter results by content type, subject terms, publication date, language, and other categories” (Luther, 2011). For this reason, Discovery Services also often include additional features such as relevance ranking of results, enriched content like tagging and social media features, and a spell-check/“Did You Mean?...” option, although there is no universal agreement on which functions are strictly required (Yang, 2010). These support user search behavior and made it easier to discover and use relevant content. A pre-harvested index of content makes searches incredibly fast, but Discovery Services are somewhat hampered by high recall and low precision.

### **Camtasia : Video Editing Software**

<http://www.techsmith.com/camtasia.html>

“Camtasia is the most widely used tool for recording, editing and producing screencast-based tutorials by libraries.” (Tortorella, 2012) Screencast applications such as Screenr and Jing are only two of many easy-to-use free screen capture applications that are available. However, the majority of free applications have recording time limits, typically 5 minutes, and they offer no editing functionality. Camtasia is expensive but libraries benefit from educational discount pricing.

Unlike many free applications, Camtasia can record a file as large as your hard drive space permits. It offers a wide array of video and audio editing and effects tools. Camtasia includes a PowerPoint plugin, enabling many options for users to embed screencasts within a PowerPoint presentation. A useful function for librarians and for business use is the inclusion of “Library Objects”. Library Objects are tracks, audio, graphics, transition effects, etc, that are saved in a common library. Using objects enables all of a library’s tutorials, libguides, video guides, and web videos to have the same logo and color scheme.

The most common use of Camtasia in libraries today seems to be in Information Literacy instruction. The University of Buffalo has a large number of instructional videos, created using Camtasia, hosted on their YouTube page. CSU Long Beach has used Camtasia to guide students in evaluating online resources and performing efficient database searches. UCLA uploads their instructional screencasts to Google Scholar. The possibilities are endless!

### **QR Codes : Smartphone Enhanced Barcodes**

QR (Quick Response) codes were developed in 1994 by Denso-Wave, a Toyota subsidiary. “At its most basic, a QR Code is a barcode on steroids. They’re used for encoding information in two-dimensional space -- like in the pages of magazines, in advertisements and even on TV and Web sites. They were originally used to track auto parts, but have become popular (especially in Japan) for much broader, often commercial purposes.” (O’Brien, 2010)

A typical barcode is comprised of vertical lines. Scanners read the distance between those lines, and the scanning laser must be positioned at close to a 90 degree angle to those lines. They are specifically suited for identifying numerical sequences. QR codes encode information both horizontally and vertically in a grid of tiny squares. They can be read from any angle. This enables a large volume of data to be encoded into a smaller space. When paired with QR reader software (free versions exist for all smartphones) QR codes can trigger actions such as the storage of information, launching a website, downloading a file, or opening media.

Libraries are using QR codes to simplify many tasks. Florida State is using QR codes in the stacks to guide users to electronic versions of print resources. Many academic libraries now use QR codes to open “e-mail a librarian” or “chat with a librarian” pages, making it possible for users to connect with a librarian from any location. And Alexander Street Press is making all of their online music databases accessible using QR codes (Little, 2011). QR codes are being used to expedite media access, website access, reference, and circulation tasks.

### **Pinterest : Content Sharing Platform**

<http://www.Pinterest.com>

The people behind Pinterest describe the website as a virtual pin board. By posting, or pinning, visually appealing images that link users to library resources, library staff can promote special collections, events, and new materials (Dunn, 2012). It can also provide a means of adding a human element to library promotion, highlighting individual library staff. Additionally, librarians are reporting finding inspiration on Pinterest for their library displays and programming.

Pinterest has been reported to be among the top ten most visited social media sites on the Internet (Slone, 2011). Driving more online referral traffic than YouTube, Google+, and LinkedIn combined makes Pinterest a must for any institution that wants to promote their products and services in today’s virtual world (Fox, 2012).

In a 2012 webcast hosted by the Association of College and Research Libraries, former Yale University librarian and technology trend spotter Joe Murphy shares numerous examples of how academic libraries use Pinterest for Information Literacy Instruction, development of collaborative resource guides, and research assistance for archival materials (Murphy, 2012). Cynthia Dubenhoffer, Director of Information Resources at Central Methodist University, describes the success her library has had using Pinterest to promote educational technology classes, support curriculum, and market library materials (2012).

## Hootsuite : Social Media Management Dashboard

<http://hootsuite.com/>

This web-based tool organizes multiple social media accounts onto a centralized dashboard where you can manage them simultaneously. Hootsuite can search the social media landscape for keywords, allowing library staff to easily track what is being posted about their library alongside other subjects of interest impacting the library and its patrons.

The scheduling feature saves time by letting the account user create and select when pre-generated messages are to be released; messages can be sent automatically across any of the social media outlets. The analytic tools available provide a method by which to evaluate the success of social media initiatives and create an opportunity to make adjustments to improve the impact of messaging and marketing.

The New York Public Library found success using Hootsuite to expand their online presence. The ability to manage their social media presence more efficiently with the software's scheduling tools, conversation monitoring, and adaptable user interface helped them to realize a significant increase in their Twitter followership. Internet traffic from Twitter to the library's website also increased (<http://www.slideshare.net/hootsuite/hootsuite-in-the-library>). Virginia Mattingly describes how the School of Law Library, University of Louisville utilizes Hootsuite (2011) and Jennifer Nardine (2012) from Virginia Tech University Library make a compelling case for the use of Hootsuite in academic libraries by describing how it maximizes librarian time management.

## CamScanner : Mobile PDF Creator

<http://www.intsig.com/en/camscanner.html>

As more information is used and saved in digital form, this application turns many cell phones and tablets into scanners. CamScanner has both paid and free versions available. It allows users to scan documents or photos, crop and rotate them, adjust the brightness, contrast and details, save it as a .jpeg or .pdf and then share them in a variety of ways, such as email, Dropbox, Evernote, or Blackboard (CamScanner, 2012). CamScanner will also send a Fax or Airprint the scanned documents. The iOS version has OCR capabilities as well.

CamScanner can be used in libraries to copy whiteboard information, copy notes, scan articles or books, library maps or locations, archival documents, and more. While copiers and scanners are readily available in many libraries, when using CamScanner you don't have to pack up all your belongings or wait in line to use the machine, especially when your cell phone or table computer is at your fingertips. Can you say that about the library copy machine?

There are other products in the marketplace such as Document Scanner, DroidScan, ScanToPDF and PDF Scanner (Silverman, 2011). Check out [CamScanner](#) at their website or search for CamScanner at the Apple Store or at Google Play.

## Pivotal Tracker : Project Management Software

<http://www.pivotaltracker.com/>

This project management tool is a web-based gizmo that allows users to input tasks for single or multiple projects. Using Pivotal Tracker assists the project manager and the entire team track progress through the life of the project. The software allows the project manager to rank the tasks in order of importance and break workflows down to a very granular level. It allows for the assignment tasks, tracking of work and creation of reports, which really helps everyone involved in the project see how everything is progressing and keeps them focused on the goals.

Pivotal Tracker can be used in libraries for managing projects such as a website redesign or general website maintenance, shelf weeding projects, construction projects, remodeling project, or managing student/ staff projects of all type. It can also be used in library instruction to teach student about planning research projects. This software has a subscription fee for businesses and individuals but it is available to no charge to not-for-profits and to educational institutions (Pivotal Labs, Inc., 2012).

## Tablets : Mobile Computers

A tablet computer is a single surface computer that uses touch screen technology to navigate to various websites and applications. While there are several options currently on the market, the iPad is currently the most popular device based on global sales (Luden, 2012). There are also devices that use Google's Android operating system and Microsoft has recently released their own tablet, called Surface.

Tablet computer usage is expected to rise in the coming years. According to Foresters Research, by 2015 tablet computer usage is expected to rise to 82.1 million users in the United States alone (Statista, 2012). In addition to being able to surf the Internet, check email and watch movies, tablets run a variety of applications that can be used in libraries. You can read e-books and PDF documents, perform word-processing tasks, scan documents and there are apps for Blackboard which can be used to integrate library resources. Take a look at tablet computer reviews at [CNET](http://reviews.cnet.com/tablets/). (<http://reviews.cnet.com/tablets/>)

## References

- Ashford, R. (2010). QR codes and academic libraries: Reaching mobile users *College & Research Libraries News*, 71(10), 526-530.
- Breeding, M. (2012). Library web-scale. *Computers in Libraries*, 32(1), 19-21. Retrieved from <http://search.proquest.com/docview/918124228?accountid=14589>
- California State University. (2009). *Camtasia Studio: Creating screen videos*. Academic Technology and Creative Services. Tutorial.
- CamScanner. (2012). Retrieved November 16, 2012, from Intsig Website: <http://www.intsig.com/en/camscanner.html>
- Dempsey, M. (2011, June 3). *Scan me! QR codes in libraries*. Retrieved November 20, 2012, from <http://qrinlibs.blogspot.com/>
- Dudenhofer, C. (2012). Pin it!. *College & Research Libraries News*. 73 (6). 328-332
- Dunn, J. (2012). *20 ways libraries are using Pinterest right now*. edudemic. Retrieved from <http://edudemic.com/2012/03/20-ways-libraries-are-using-pinterest-right-now/>
- Fox, Z. (2012). *Pinterest drives more traffic than Google+, YouTube and LinkedIn*. Mashable. Retrieved from <http://mashable.com/2012/02/01/pinterest-traffic-study/>
- Hoffmann, Glen. (2010). *PBworks: Making teams vastly more productive*. Retrieved November 20, 2012, from Slideshare: <http://www.slideshare.net/ghoff86/p-bworks-overview1004#bttnext>
- Hootsuite. (2011). *HootSuite in the library -- A NYPL case study*. Retrieved November 19, 2012 from SlideShare: <http://www.slideshare.net/hootsuite/hootsuite-in-the-library>.
- Kroski, E. (2012). Pinterest. *Online Education Database*. Retrieved from <http://oedb.org/blogs/ilibrarian/2012/20-great-ways-libraries-are-using-pinterest/>
- Luden, I. (2012, March 5). *Forrester: No Android tablet has more than 5% share vs iPad. How does Amazon's Kindle Fire compare?* Retrieved November 18, 2012, from Techcrunch: <http://techcrunch.com/2012/03/05/forrester-no-android-tablet-has-more-than-5-share-vs-ipad-how-does-amazons-kindle-fire-compare/>
- Luther, Judy and Maureen Kelly. (2011). *The next generation of discovery*. Retrieved November 21, 2012 from Library Journal: [http://www.libraryjournal.com/lj/home/889250-264/the\\_next\\_generation\\_of\\_discovery.html.csp](http://www.libraryjournal.com/lj/home/889250-264/the_next_generation_of_discovery.html.csp)
- Mattingly, V. (2011). Internet reviews: Hootsuite. *Kentucky Libraries*, 75(2), 14-15.
- Murphy, J. (2012). Pinterest for academic libraries webcast. Murphy ACRL. *Association of College Research Libraries*. retrieved from SlideShare: <http://www.slideshare.net/joseph.murphy/pinterest-for-academic-libraries-webcast-murphy-acrl#bttnext>
- Nardine, J. (2012). *Social media as time suck: The myth of efficiency*. Retrieved November 17, 2012, from <http://hdl.handle.net/10919/18742>
- O'Brien, T. (2010, June 21). *In a nutshell: What are QR codes?* Retrieved November 20, 2012, from <http://www.switched.com/2010/06/21/in-a-nutshell-what-are-qr-codes/>
- PBwiki, Inc. (2012). *For librarians: PBworks in your library*. Retrieved November 19, 2012, from PBworks website: <http://pbworks.com/librarians>
- Pivotal Labs, Inc. (2012). *Pivotal Tracker features*. Retrieved November 17, 2012, from Pivotal Tracker Website: <http://www.pivotaltracker.com/features>
- Silverman, M. (2011, September 2011). *5 Android apps to turn your phone into a mobile document scanner*. Retrieved November 18, 2012, from Mashable Business: <http://mashable.com/2011/09/03/android-apps-document-scanner-pdf/>
- Sloan, P. (2011). *Pinterest: Crazy growth lands it as top 10 social site*. CNET News. Retrieved from [http://news.cnet.com/8301-1023\\_3-57347187-93/pinterest-crazy-growth-lands-it-as-top-10-social-site/?tag=mncol.txt](http://news.cnet.com/8301-1023_3-57347187-93/pinterest-crazy-growth-lands-it-as-top-10-social-site/?tag=mncol.txt)
- Statista. (2012). *Forecast: U.S. tablet PC users 2010-2015*. Retrieved November 16, 2012, from Statista Website: <http://www.statista.com/statistics/199761/forecast-of-tablet-pc-users-in-the-united-states-from-2010-to-2015/>
- Techsmith. (2012). *Screen recording and video editing software*. Retrieved November 20, 2012, from <http://www.techsmith.com/camtasia-2gslp.html?gclid=cjnqxvbo4bmcfsonpaodfyahw>
- Tortorella, D. (2012, January 26). *Camtasia examples - Beyond simple screencasts*. Retrieved November 21, 2012, from [http://www.webjunction.org/documents/webjunction/camtasia\\_examples\\_045\\_beyond\\_simple\\_screencasts.html](http://www.webjunction.org/documents/webjunction/camtasia_examples_045_beyond_simple_screencasts.html)