Smarter Libraries through Technology:

Mobile heads into the Mainstream for Libraries

By Marshall Breeding

The increased adoption of mobile computing has created a new niche in the library technology industry. Vendors are now motivated to produce products that enable patrons with smartphones, tablets, and other Internet-enabled, smaller form devices to access library collections and services. We continue to see dramatic increases in the number of individuals using these devices and in the amount network traffic that they consume. According to the Pew Internet and American Life Project report on Smartphone Adoption and Usage, published in June 2011, 83% of all Americans own a cell phone and about one third of these are smart phones. Of these smartphone users, about a quarter depend on them as their primary access to the Internet. (See: http://www.pewinternet.org/~/media/Files/Reports/2011/PIP_Smartphones.pdf)

According to Cisco, mobile network traffic almost tripled in 2010 for the third year in a row, with video, not surprisingly, representing an ever-increasing proportion of this traffic. In 2011, video traffic first consumed more than half of all mobile bandwidth (http://www.cisco.com/en/US/solutions/ collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-520862.html). Given the upward trend toward increased adoption of mobile devices, we can reasonably expect similar patterns in access to library resources. This is a trend that libraries need to monitor carefully and strategically.

As mobile access continues to rise, library software developers see a potential new market emerging. Libraries increasingly show interest in exploring these new products. At this time, almost any vendor involved in producing library automation products has announced or delivered at least an initial offering that supports mobile users. Most are taking tentative steps, testing the waters to both measure the market demand and to gain experience that will help inform future strategies regarding the types of products and the features and functionality best suited for mobile delivery.

Mobile-oriented library products currently come from a few different angles. Almost all the companies offering library automation products with a patron-facing interface have come out with at least a basic mobile version. This group includes those offering integrated library systems and discovery interfaces, as well as those like Springshare that provide products to support subject guides and other reference-oriented library services.

Some vendors come in from other directions. LibraryThing, the popular book-oriented social network that also offers LibraryThing for Libraries, has developed a cross-vendor mobile product, LibraryAnywhere, which works with most of the ILS catalogs. Others, like Boopsie, specialize in development of mobile technologies, but have not previously been involved in library automation. These companies leverage that expertise to produce mobile library products. Many of the publishers and providers of content...
products that are popular among libraries are now offering mobile versions.

This means that the variety of technology products that libraries need to support their services is, as always, on the rise. At one time, we considered the integrated library system to be the core system that covered the automation needs of most libraries. In recent years, discovery systems have become an expected add-on, responding to the need to provide a better environment for library patrons to explore and interact with library collections. Today, with the rise of mobile technology, there’s yet another genre of products that libraries need to add to their repertoire. Even within the mobile sphere, libraries may be faced with the need for multiple products to extend their Web site, online search or discovery service, and their many different content offerings to smaller platforms.

Given the wide variety of software that now competing for thinly-stretched library resources, the need to purchase yet another major set of technology products will not necessarily be welcome news. After investing in discovery products that were supposed to revamp the way that libraries deliver their services to patrons on the Web, are we now to start over again to address those that make use of mobile devices instead of desktop or laptop computers? How much of what we gained in new-generation discovery systems can be applied to mobile? In general, it seems to me that support of mobile should be an incremental step, both in financial investments and in the conceptual and functional advancements seen in the discovery arena.

My feeling is that that mobile technology must become an organic part of a library’s technology strategy and not just another add-on. It’s important that libraries offer the appropriate subset of functionality for their mobile interfaces relative to what is available on their full-form Web sites. While the interface needs to be simplified to accommodate the constraints of mobile platforms, it’s important to maximize the services and content available, especially given that an increasing number of individuals rely on mobile devices as their primary means to access the Internet. I’m also concerned about the fragmented approach that results as libraries deploy separate apps or mobile-optimized Web sites for each of their major products or services. Will library patrons really be interested in downloading two, three, or more apps just to use library resources? I’m hoping for a more cohesive and organic approach where the library delivers its mobile presence in a unified way. I’d like to see a scenario where a library may invoke specialized apps as needed, but in a way transparent to library users. This kind of unification is a goal that libraries are increasingly following on their Web sites, and it should carry over to their mobile presence.

Mobile Roundup 2011

Over the last two years, many library-specific mobile products have been announced or released. We last covered the arena of mobile applications related to library automation in the March 2010 issue of Smart Libraries Newsletter. In this month’s newsletter, we survey the major products currently available, focusing on those that have emerged or have been significantly enhanced in the last year. The products mentioned here do not necessarily constitute a comprehensive list of every mobile product available to libraries, but rather a few examples of some of current offerings.

SirsiDynix BookMyne

SirsiDynix launched its BookMyne as a free mobile service in January 2010. BookMyne provides a basic library presence including catalog search and the ability for patrons to login to their account and view items currently charged. The library can customize its presence in BookMyne with their own logo, a photo of their library facilities, a link to their Web site, opening hours, and other customized information.

BookMyne itself is available to libraries without an additional fee and is available to library patrons as a free download. Currently, BookMyne is available only for the iPhone, iPod Touch and iPad, though an Android version is forthcoming. Once a patron has downloaded the BookMyne app, they are able to discover and access the participating libraries. While they can view details about any library they find through BookMyne and search their catalogs, they will only be able to sign in to access their
Libraries can participate in BookMyne if they operate either Symphony version 3.3 or Horizon 7.5 and if they have installed the optional Web Services module. Web Services exposes a selected set of APIs from the underlying ILS available to external systems. Though developed to support patron interfaces such as BookMyne, other applications can be programmed to take advantage of Web Services to gain access to ILS functionality. SirsiDynix initially made Web Services available to libraries using Symphony in 2010; Web services for Horizon was released in March 2011. SirsiDynix offers Web Services to libraries operating supported versions of Symphony or Horizon without cost.

SirsiDynix released BookMyne 2.1 in March 2011 with new features that include LDAP authentication, integrated barcode scanning, expanded functionality related to My Lists, the ability to display New York Times bestseller lists, integration with reading-oriented social services such as GoodReads, the ability for patrons to view their fines and fees and to change their PIN. This version of BookMyne also includes a tool for patron self-registration for libraries interested in offering this service.

BookMyne stands as one of the few mobile applications available without direct cost to the library. As long as the library meets the required prerequisites of operating a recent version of either Symphony or Horizon and implements Web services, it can rely on BookMyne to provide a basic mobile presence. The potential user base for BookMyne will expand as SirsiDynix deploys versions for devices other than iPhones and as more libraries implement its Web Services option.

SirsiDynix BookMyne was covered in the March 2010 issue of Smart Libraries Newsletter.

LibraryAnywhere from Library Thing

LibraryThing, partially owned by R.R. Bowker, offers a mobile application for libraries called LibraryAnywhere. Leveraging the integration technologies created for the LibraryThing for Libraries service for layering tags and other social content into library catalogs, LibraryThing has been able to develop a mobile catalog that operates with any of the major ILS products. LibraryAnywhere offers a competitive set of features relative to the mobile catalog products offered at a price that undercut most alternatives. LibraryAnywhere operates on the iPhone, Android, and Blackberry.

LibraryAnywhere was covered in the March 2010 issue of Smart Libraries Newsletter.

The Library Corporation

The Library Corporation offers LS2 Mobile for its library customers that use either Carl.X or Library.Solution. LS2 Mobile operates as an extension to LS2 PAC, the company’s next-generation patron interface, which likewise operates with either of TLC’s ILS products.

Features offered by LS2 Mobile include the ability to search the library’s catalog, view results enhanced with cover images, to login with their library ID number and PIN, view patron account information, and to place or cancel holds. Patrons with LS2 Mobile can search the catalog of their own library or other participating libraries that have implemented LS2 PAC, though they can only sign into their own library.

TLC launched the original version of LS2 PAC in November 2010 as a native application for Apple’s iOS, supporting iPhone, iPod Touch, and iPad. A version for the Android platform was released August 2011.

MyMobileLibrary from Boopsie

Boopsie entered the library mobile space early and has established itself as one of the leading providers of mobile library technologies. Boopsie can integrate with most
TechLogic – Boopsie partnership

A collaboration between TechLogic—a company specializing in products related to self-check and automated material handling—and Boopsie was formed to produce a suite of products that takes library self-service to a new level, allowing patrons to use their smartphones for self-service in libraries that have implemented RFID. This joint effort has produced the first mobile library self-check mobile application compatible with RFID security.

The basic concept involves allowing patrons to use their smartphone to check items out to themselves from anywhere within the library, avoiding the need to line up at a self-check station or service desk. For libraries that have implemented RFID, an additional step is required to deactivate the security bit on the RFID tag so that the item can pass through the library’s security gates without sounding an alarm. This roving smartphone-based self-check service is now available using a specialized mobile app developed by Boopsie and a security station provided by TechLogic, branded under the name MyMobileLibrary.

The MyMobileLibrary app is an enhanced library smartphone program that includes the usual mobile catalog features, plus the ability for patrons to perform self-service circulation using a supported smartphone. Self-service has transformed many libraries by using self-check stations to supplement or even replace circulation transactions performed by a library staff member at a service desk. Self-check has allowed many libraries to operate with fewer personnel and to redeploy staff members in ways that offer more in-depth or in-person services of higher value and interest. Allowing library patrons to use their smartphones instead of library provided self-service stations may facilitate time savings and convenience, especially for busy libraries. MyMobileLibrary currently operates by reading the barcode printed on the RFID tag, accomplishing the self-check through a secure login to the ILS.

One of the key features of an RFID implementation involves preventing the removal of unauthorized materials. When charged to a patron at a service desk or a self-check station, the security bit of the tag is deactivated, allowing a patron to carry it past the exit controls without sounding an alarm. To complete a self-check through a patron’s own smartphone using MyMobileLibrary, it’s necessary to deactivate the security bit of the tag as a separate step. This component of the product, called MyMobileLibrary: Security Kiosk, is provided by TechLogic. One of these stations would be positioned near the exit of the library, so that patrons can quickly complete their self-checkouts. Patrons simply place their items on the kiosk shelf, which initiates a process that interrogates the ILS and deactivates the security bit on the RFID tags for all of the items that have been properly charged and flags any with problems.

MyMobileLibrary was initially deployed in the Los Angeles Public Library Silver Lake Branch, branded LAPL to Go. The product is expected to be generally available by Fall 2011.

LogiXML

LogiXML, a company with a background in non-library sectors has developed a data mining and analytics tool targeting academic libraries. The company has developed a suite of library-specific applications, called Logi Insight for Libraries, designed to extract data from all the different components of its automation infrastructure. This allows the library to create comprehensive reports regarding the use of library resources and services. The tools work by creating connections and interoperability into the integrated library system, interlibrary loan, electronic resource management tools, discovery services, and other appli-
cations to mine data that can be exploited to help libraries make management decisions based on detailed usage data.

Logi Insight for Libraries was created in collaboration with New York University, Boston College, and Texas Tech University. It includes a wide range of standard reports plus the ability for the library to create custom reports. Budget dashboards allow library administrators to visually see the status of any given budget category. In June 2011 LogiXML released eResource Analytics, an extension to its basic Logi Insight for Libraries product that tracks and analyzes e-resource use and financial data to help libraries assess the value of each of their content products and to make informed decisions regarding renewals and potential new procurements.

This same infrastructure can also provide a platform for creating mobile library applications. Boston College, for example, an early partner with LogiXML, developed their mobile application using LogiXML technology that helps students find library materials. Based on Logi Insight for Libraries, Logi Mobile offers many of the usual features such as the ability for patrons to view their library record, to check the availability of materials assigned for courses, to search and browse library catalogs, and place holds on library materials.

**Innovative Interfaces AirPAC**

Innovative Interfaces has offered a mobile catalog product longer than any other library automation vendor. The company launched Millennium AirPAC in June 2001 to support small wireless devices such as PDAs, long before smartphones became popular consumer devices. The initial version of AirPAC provided a basic catalog interface, interacting with the XML server component of Millennium.

In 2010, Innovative revamped the AirPAC to support modern smartphone platforms. Libraries that had purchased the original product were eligible for a free upgrade to the AirPAC platform for Smartphones. Platforms supported include the Blackberry Storm, iPhone, Android, and the Palm Pre. Features available include catalog search using the RightResults relevancy search technology that Innovative developed to sort results in ways appropriate for library resources, display of cover images, and access to the patron’s MyMillennium account, including the ability to place requests to reserve items, and to renew items charged. The product integrates with the Google Map API to display the location of library branches.

Innovative’s AirPAC for Smartphones was covered in the March 2010 issue of *Smart Libraries Newsletter* (A Decade of Mobile at Innovative).

**Polaris Mobile PAC**

Polaris offers the Polaris Mobile PAC, launched in January 2010, offering mobile access to the online catalog of the Polaris ILS. Features available include catalog search, display of library hours, and new or popular title lists. Catalog search results include cover art, current status information such as branches available, with links to place requests. Patrons may login to view their library account, make requests, and access an ask-a-librarian service, update their address information, view their reading history, list items currently charged, and any fees or fines due. The Polaris Mobile PAC supports the iPhone, Android, and the Blackberry.

**BiblioCommons**

BiblioCommons offers a mobile app with features related to search and tracking and managing borrowed items. Its search capabilities follow the same library-specific relevancy ranking employed by the Web version, with cover image display for items in search results. Searches can be limited according to specified criteria such as location, audience, format, topics or other categories. Users can view the current status and availability of items, place requests for holds, and check items. A view of account status shows any items overdue, items coming due, total items checked out, holds placed and available, recent returns, and any fines or fees due. The app includes a built-in barcode scanner that can be used in the library to look up information on items. Libraries can customize the app with their own logo, branch details and with GPS-based location maps. The BiblioCommons app also allow patrons to browse library-defined lists such as best sellers, recently received titles, or materials recently reviewed by other BiblioCommons users.

**WorldCat Mobile**

WorldCat Mobile was released as a full production service in June 2011. OCLC has offered mobile access to WorldCat since January 2009, when it launched its original WorldCat Mobile pilot to libraries in North America. The pilot was extended to selected countries in Europe the following June. This project was done in partnership with Boopsie, using its development platform as the basis for a mobile app to search WorldCat. This pilot effort has been superseded, with a transition from the Boopsie-based app to the current WorldCat Mobile Web site completed in June 2011. WorldCat Mobile features the ability to search WorldCat and find holdings in the user’s home or nearby libraries. Libraries subscribing to WorldCat Local will see some of its distinctive features such as linkages with the back-end ILS.
Mobile Discovery All Around
Each of the organizations offering broad discovery services also offers a mobile version, generally taking advantage of the expanded search scope of search, including results including books, scholarly content, and digital content represented in the library’s index. Discovery services with such mobile versions include Primo, Summon, and EBSCO Discovery Service.

This brief survey demonstrates the wide variety of mobile products available to libraries and that there is steady progress on developing new products and exploring some innovative ways to improve library services through these technologies. Regardless of the automation system or discovery service employed, libraries can gain a mobile presence, usually within modest pricing and often as a free service. Yet, these mobile applications are fairly early in their development cycle. We can anticipate additional enhancements to the functionality available, which over time will approach equivalent capabilities to their full-Web counterparts. Today, the main competition among library technology providers lies in having some type of mobile product available. As demand by library patrons expands, the strategic importance of these products will likewise increase.

— Marshall Breeding

Library Technology News in Brief

Excerpted from Press Releases Posted on Marshall Breeding’s Website (http://www.librarytechnology.org/)

Government Libraries Select EOS International as Library Automation, Knowledge Management Solution

(Carlsbad, CA - September 07, 2011) EOS International, a leader in cloud computing library automation, continues to grow its client base by adding a number of high-level governmental clients. With government clients in both the U.S. and Canada, EOS provides the highly customizable, cost-effective and secure knowledge management solutions demanded by government agencies.

A few of EOS’ key government clients include:

- Pentagon
- Army Corps of Engineers
- VA Medical Centers
- Department of Transportation
- U.S. Postal Service
- U.S. Air Force
- U.S. Army
- U.S. Embassies
- U.S. Navy
- Federal Aviation Administration
- Customs and Border Protection

“EOS has been an established GSA vendor for over 20 years. With our 508 compliance, all products are fully accessible to all users in accordance with federal accessibility standards”, says Sal Provenza, Vice President of Global Sales and Marketing. “EOS International has a great track-record of providing exceptional knowledge management solutions to government libraries.”

EOS provides government clients with state-of-the-art security utilizing the EOS Global Data Centers. This appeals to government agencies, as EOS provides a combination of physical security and pro-active systems security to ensure the integrity of client data.

EBSCO’s NoveList and ChiliFresh Connections Join Forces

Las Vegas, NV, September 7, 2011 – ChiliFresh, a global provider of patron social networking, book reviews, and cover art, and NoveList, a provider of leading readers advisory services, announced a new content agreement today, intended to enhance both social networking and reader advisory within the library catalog.

Under the agreement, NoveList content integrates with ChiliFresh Connections, providing library users with lists of similar/recommended books based on their Connections bookshelves and book discussion groups. Connections, a new software offering from ChiliFresh, combines social networking with the library PAC and facilitates discussions among people worldwide based on literary inter-
est and habits. The software integrates closely with other social networks such as Facebook and Twitter, and enables users to create and share digital personalized bookshelves, form literary communities and book clubs, and participate in group or one-on-one chats.

NoveList, a division of EBSCO Publishing, provides products to help users discover new books that match their interests and are on the library's shelves. NoveList Select delivers that high-quality content directly to the library catalog. NoveList recently ranked #1 in an independent National Readers Advisory survey for quality of content, ease of use and usefulness to librarians and patrons. This agreement also enables Chilifresh customers to view their ratings and reviews within NoveList's database offerings.

"Libraries subscribing to both NoveList Select and Chilifresh Connections can now offer patrons a complete, seamless solution for social networking, reviews, and reader-oriented content," said Chilifresh President & CEO Scott Johnson. "By integrating these services, the library catalog comes alive, making it incredibly easy for people to find the information they need and get to know people who have similar interests and reading habits."

"Chilifresh and NoveList both understand the need for libraries to form ongoing, personal relationships with members of their communities," said NoveList Founder Duncan Smith. "By joining our services within the library catalog, the library remains the community "go to place" for reading recommendations, book discussions, and easy access to information."

**EasyBib introduces new paper link feature with Google Docs**

New York, September 7, 2011 – EasyBib has been working with Google products for over a year now, making the writing process easier for students. Now, in a brand new student-friendly enhancement, writers can associate their bibliography projects with a paper they are working on in Google Docs, directly from the EasyBib site.

The process is simple: Once the writer has logged in to the popular bibliography management service, they click the paper button from the projects section and from there, they can create a new Google Doc to associate to their EasyBib bibliography or they can link it to an existing document. Any time they log back in to their bibliography projects, they're just a click away from the paper they've written in Google Docs.

More and more schools across the country have been encouraging their students to use Google Docs for their research papers and writing assignments since it's accessible from any computer or smart phone and since different students can edit and collaborate on the same document in real time. Now, those writers can easily manage and share their paper and bibliography from either website.

"This great new feature piggybacks off our other integrations with Google," commented Darshan Somashekar, EasyBib co-founder. "Previously, we made it possible to export a fully formatted bibliography to Google documents, and, of course, as part of the Google apps marketplace, the EasyBib app has now been implemented by hundreds of schools. This newest feature helps EasyBib to continue to integrate with the modern student's workflow, allowing our 27 million users to access their completed bibliographies and papers from either website."

EasyBib.com is an automatic bibliography maker, providing quick and accurate formatting to compile a works cited list. Founded in 2001 by students, EasyBib is headquartered in New York City and used by over 27 million students. EasyBib offers up-to-date formatting in MLA, APA, and Chicago styles, footnotes and parenthetical citations, note taking features, and more. Visit: www.easybib.com.