

Libraries on Move: Library Mobile Applications

Nidhi Khare

Abstract

Presents an overview of trends in mobile tools and application for libraries, including the Internet Mobile, Mobile Multimedia, and SMS/texting etc. Examines mobile search providers and potential applications for information seeker and librarians. Analyses the present usage of mobile devices, providing an overview of devices, providers, and features, describing the various activities these devices support for well library use , focusing how libraries and our librarians are responding with services tailored for these devices and what can be done by libraries in future in this respect.

Keywords: Mobile Application, Electronic Resrouces

1. Introduction

Learning using mobile technologies such as mobile phones/smart phones, iPhones, PDAs, iPod is boon especially for the peoples who are busy with their work and those jobs require them to continuously move. But mobile applications for information seeker too have grown up tremendously with the growth of technology. From Children to adults all are finding their piece of information with this wireless technology. Various research has been carried out in this respect and it came up with unexpected results which shows people today are using this handheld device for text massaging, photo messaging, access internet from their mobiles, e-mail and do so many interactive activities with handsets various features. In the records we have found that in united states the Mobile phones have been much used by 18-24 age group in the year 2007 , that's definitely are students , scholars, working class who need this kind of devices that educate them in" Move and learn" environment. Nation wide current study in mid 2008 (ABI Research)on the mobile phone users on whole

declares 75% of adults and 90% of college students have mobile phones and 62% of subscriber use text messaging regularly. Landline phones are no longer in use now.

2. Devices in the markets

The devices in market today (Mobile phone/smart phone, PDA, iPhone, iPod - 2008 coverage) include he following:

- Treo 750
- RIM Blackberry storm
- RIM Blackberry Bold
- Sony play station portable
- M300
- LG OZ
- Kindle (Amazon's)
- Samsung ultra smart F700
- Samsung ultra Q
- Samsung B5200
- Samsung B470
- Apple's iPhone
- Apple's iPod touch
- Verizon voyager
- HTC S710
- Nokia N93
- Nokia N810
- Nokia N95
- Nokia N96



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HTC'S Dream(Development phase with Google's open software Operating System Android) Obviously they are in market with their special features storage capacity and soft wares other technologies according to their Prices but latest research describes, the most desirable in the smartphone/iPhone category are:

- Nokia N97
- RIM Blackberry storm
- RIM Blackberry bold
- HTC G1(Android)
- Apple iphone 3G
- Sprint Instinct

Recent addition is the BlackBerry Storm and T-Mobile's G1 running Google Android, but now it's Nokia's turn to get in on the act with this: the N97.

Nokia has announced that its high-end N97 3G smartphone combines a touchscreen with a tilted 3.5-inch display, a full QWERTY keyboard, and inviting a straight-up comparison with Apple's trend-setting iPhone.

Normal features of all the devices allows Multimodal interaction like visual access,voice interactions, gesture interaction, various searches like location based searches, information search, Multimedia(Audio, video, Graphics, Digital contents , etc.)Downloads and its other in built capabilities.

3. Mobile Browser (Full web in our palm)

Browser allows browsing sites online and helps the user to search information from all the access points, they differ greatly in terms of their operating systems supported, the best can display most websites and offer page zoom and keyboard shortcuts, while others can only display websites optimizes for mobile devices. Vendors are searching for the best and adapting significant change due to the changing needs of the patrons as it evolves from a lay man's internet to full-fledged web experience.

Independent browser software vendors such as Opera, Open wave and ACCESS have all been working on browsers that incorporate the latest Web standards and start to create an experience that overcomes some of the inherent shortcomings of mobile devices. Today many smart phones ship with browsers from these vendors, as well as some internally developed by Nokia and others that can render many Web pages without the need for proxy server-based content adaptation, and automatically adjust layout for the screen and navigation requirements of a handset. Opera 9.5 and opera dragon fly are recent developed browser from opera mobile. Mobile firebox is also in the line of browser.

Others listed below are free and in-built with the devices:

SI No.	Browser	Key Features	Operating System	Price
1	Opera Mobile	Multiple tabs, Zoom-in	Windows Mobile, Symbian	\$24
2	Opera Mini4	Compressed downloads for fast browsing, Zoom-in	Java	Free
3	Skyfire	Display rich websites with Flash or widgets like YouTube, customizable zoom feature	Windows Mobile, Symbian	Free
4	Safari	Display rich websites like YouTube, zoom feature,	iPhone	Free with iPhone

		excellent touch-based user interface		
5	Mozilla's Minimo	Multiple tabs, Social book marking	Windows Mobile	Free (open source)
6	Google Android	Display rich websites, zoom feature, touch screen interface	Google Android	Free with Android
7	Bitstream's Thunderhawk	Compressed downloads for fast browsing, Zoom-in display	Symbian S60, Windows Mobile, Java	\$49.95/year or \$5.95/month
8	Microsoft IE for Mobile	Standard browser features	Windows Mobile	Free with Windows Mobile
9	Blazer	Standard browser features	Palm OS	Free with Palm OS
10	S60 Web Browser	Standard browser features	S60	Free with S60

4. Mobile Technology Versus Libraries

Mobile Technology has now come up with "Libraries in Hand" trend. Our librarians are in move to determine how these devices are affecting information access and ensure that they are communicating with patrons and providing web content in the most appropriate and effective ways. Our Librarians must be prepared to take this challenge and put his efforts to increase the market and demand for mobile access to personalized facts and information anytime, anywhere on one's own handheld device.

Since Mobile handled devices truly are personal devices, search histories and physical locations can be harnessed to produce more accurate, individualized information and services. Users on the go don't want to wait for list of web results, they want answers to their question atonce thus find mobile search different from regular web search.

More and more library users are using their cell phones or other mobile devices (e.g., PDAs, smartphones, etc.) for much more than talking and

texting. Many patrons are searching and browsing the web, reading magazines and books, and generally doing things that recently used to do by computers. Technology has changed people's way of perspective and thoughts and producing its capabilities to the fullest even I am as a author to this article unable to cope up all the technicalities involved in mobile technology world because every second new technology is replacing other, yet I have tried my level best.

Libraries today are covering most of the technologies given by mobile industry like PDA's, Blackberry, iPod, Cellphones, UM PC's (Ultra Mobile PC) and mobilising library contents in a portable form suitable for small screen and delivering short services in the form of contents/information with device's multiple searching features.

As not all content is optimized for the mobile network, so the Transcoded Web is developing to transcribe content to fit into a mobile device. Its not perfect and some content is lost, but its happening. There is mobil.licio.us, mobile blogger and a mobile My Space version.

Librarians will need to become proficient in using these devices to enable users to access them anywhere from anyplace.

Sirsi announced a product called PocketCirc-software that runs on a PDA that allows library staff to perform circulation tasks in any part of the library with wireless connectivity. I think that libraries will benefit from this type of flexibility. With a handheld PDA device in a Windows CE environment, sirsi pockcir combines the power of sirsi Unicom Library management system with the flexibility and ease of PDA to offer you all the benefits of wireless technology. The addition of circulation information and book locations in the library take advantage of the mobility of the device and add another degree of self-sufficiency to the transaction. Libraries may want to consider providing access to circulation records, book due dates, overdue notices, and ILL requests via cell phones and handhelds to better serve their mobile patrons. It definitely seems a boon to the staff as free them to serve user and perform both online and offline circulation operations without having to be on the desktop workstation.

4.1. E-books and Databases

The publishers are in move to convert content into an e-book format for mobile devices (ranging from Kindle, Sony's e-book reader, cell phones, and other e-book readers). CSS does allow for remarkable functionality and formats the e-books as you desire and provides a great reading experience for the user.

PRLog (Press Release) – Nov 03, 2008 – Fable Publishing of Chico, California launched its new mobile-optimized website specifically for internet browsers using mobile devices such as Pocket PCs and smart phones like the iPhone or Blackberry.

The strong internet browsing capabilities of new generation mobile devices have increased demand for online mobile content, and the free ebooks normally available from Falbe Publishing's main websites can now be easily obtained by mobile device users at <http://mobile.falbepublishing.com>

To create a positive and useful experience for mobile internet browsers, the new mobile website presents a very brief and simple version of the publisher's offerings in order to accommodate small screens. Only brief messages and directions on how to access content are on the mobile website so users

Google has worked with major publishers to bring chapters, pages and volumes off of the bookshelf and onto the mobile device. The end result would be downloadable e-books which Google users would store on their Blackberries, PDA's and smart phones (or mobile e-book reading devices) along with the traditional PC's and laptops which would either be free & advertiser supported, or available via 'on-demand' micro payments (... Google Checkout perhaps...).

Jens Redmer, director of Google Book Search in Europe, said: "We are working on a platform that will let publishers give readers full access to a book online. E-Books are being provided by Overdrive, NetLibrary and more, which can be used on mobile devices.

We also have lexisNexis content on the blackberry wireless handheld, you can search the LexisNexis services or access your LexisNexis publisher's topic from the device. It's a leader in providing integrated information solution.

Ovid is also mobilized the critical information in the form of journal articles, an instant access to vital information, drug, drug interaction, and other topics.

Factiva (vendor) gives news news and sales leads on Blackberry.

dotMobi Releases DeviceAtlas Version 2.1 Mobile Device Database



Databases (all about devices) content on mobile is recent achievement by .mobi , The company behind the

.mobi Internet domain and the merge mobile web developer forum announced that the 2.1 version of DeviceAtlas™—the world’s most comprehensive mobile development database—is now available... It includes a er of features including data analytics and improved search capabilities and these tremendous features join recent technical enhancements like automated phone capability test and ability to download personalized versions of the databases.

Trey Harvin, CEO of dotMobi, said, “With DeviceAtlas, we have created the most complete database of handset data out there. The addition of Motorola’s device data ensures the comprehensiveness of DeviceAtlas. Sprint’s participation in DeviceAtlas complements that carrier’s industry-leading open approach to working with application developers through the Sprint Application Developer Program and Professional Developer Program.”

4.2. Mobile Optimized Catalogs and Ready References

ILS vendors are starting to make Mobile Optimized Catalogs - so that patrons can access library catalogues through their mobile device. AirPAC product enables searching library catalogs as well as patrons can access their library account , request

and renew their items on their own wireless device(PDA,Web enabled phones,web tablet, laptop), it’s a product that will auto detect the type of device you are using and format accordingly the catalogs without graphics for better viewing. libSirsi-Dynix, Innovative and even Library Thing have this option now. Ready Reference in the form of various e-book publications is available for a wide range of mobile devices, also search with Mobile Ask, answer.com.

4.3. Mobile optimized library websites

Libraries have been talking about optimizing their web sites for mobile devices for years, but mobile browsers have lagged in their ability to display content and have had limited functionality The evolution of mobile device browsers (listed above)has benefited from a marked increase in processor power and the increased speed and coverage of wireless network infrastructures. The browser development has also been accelerated by the increased number of web sites being optimized for the mobile users. Megan Fox’s who is web and electronic service Librarian at simmons college explains topic in her site web.simmons.edu which covers many of her presentations on mobile trends and use in libraries and discuss about the various aspects in this regard. She also lists several libraries with mobile optimized sites including:

American university library
<http://www.library.american.edu/mobile>

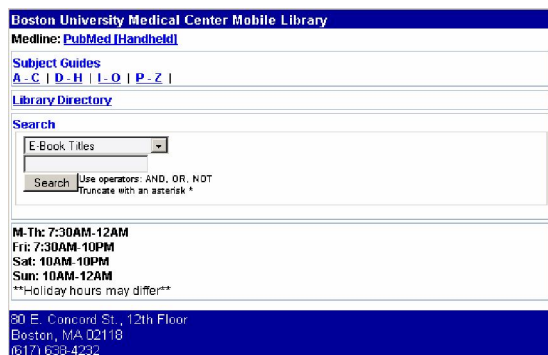
Ball State University Library
<http://www.bsu.edu/libraries/mobiles/>

Boston University Medical Center Mobile Library : <http://med-libwww.bu.edu/mobile/index.cfm>

- Cal Poly Pomona University Library
<http://www.csupomona.edu/library/mobile>
- Hanover College, Duggan Library
<http://library.hanover.edu/mobile/mhome.html>
- Harvard College Library
<http://hcl.harvard.edu/mobile/versions>
- University of Illinois Library
<http://hades.grainer.uiuc.edu/nikki/mobile/version1>
- New York University Libraries
<http://library.nyu.edu.8000/mobile>
- University of Richmond Library
<http://oncampus.richmond.edu/academics/library/mobile>
- St. John’s University, College of St. Benedict
- University of Virginia Library
<http://mobile.virginia.edu/library.php>
- Duke Libraries
<http://library.duke.edu/mobile/>

As a mobile user one can find that how these libraries have maintained their mobile web content. They all generally give the details of library hours, library location, library services and allows the user to connect with librarian for reference service. I try to put the details of contents of one library to better understand the contents of the sites.

For example: Boston University Medical Center Mobile Library



The Boston library covers the resources in PubMed (Handheld) form and mobile search facility with various searches. All library e-resources like e-books, e-journals, bibliographical databases are in portable format for mobile users.

4.4. Multimedia Contents

NetLibrary audio books of San Francisco public library are now available on mobile device and Library of congress audio tour just by calling the number by your cell from any place. The New York public library or eNYPL with its multimedia collection is accessible via mobile device.

Mobile TV like MobiTV allows live TV that goes wherever you go and view 25 channels with normal search. TiVo is also now available on mobile devices. YouTube and Second Life are working on mobile versions. Libraries have produced videos particularly for the mobile screen.

4.5. Mobile Search

Mobile search options are full of information sources, Studies declares User’s are mostly searching E-mail and Ring tone downloads at routine basis. Weather, news, sports, local search, Game Downloads, travel information, wallpaper downloads, directory assistance, financial information, paybills, shopping are another less performing activities by mobile user’s.

Google.com, yahoo.com, m.live.com are the search sites(engines) that enables various searches and provide information.

4Info is mobile search service that allows searching through shortcuts. The future of mobile search combines exclusive patent-pending search personalization, recommendation and advertising technologies, to create a superior mobile

information experience while driving career revenues. Medio search system is a gateway to the information wireless users seek while on the go. There are other searches on mobile like meta search, photo mobile search, spoken/voice search, location based search.

4.6. SMS/Texting – Library’s instant Access

Google SMS enables you to send queries as text message over your mobile phone or device and easily get precise answers to our questions, No Links, No web pages, just text and information in seconds. Merriam Webster (online) is mobile subscription facility, and just by putting our mobile number we get the word information just by messaging.

Library OPAC system is now mobilized by facility of text message to check the availability and other details of books. Publishers are sending extracts from books out via SMS. Websites are now giving the option of sending content to IM addresses and via SMS.

Librarians are extending reference services - Altarama in Australia provides a SMS to email to SMS service for librarians/library users. Teleflip and Gizmo SMS are other new services.

5. Future Potentials of Mobile Application in the libraries

More and more changes are expected within four to five years in the field of mobile technology and its application to the libraries, the day is not far when we will use phone to read barcodes or RFIDs in the library and OPACs will develop GIS sensitivity and be able to communicate with users through their mobiles for holds, fines, late notices, alerts, etc.

We will expect having large component of asynchronous voice messaging including threaded discussions using v-mail technologies that will help the staff in providing ready reference service leaving behind texting and SMS. Timed v-mail as well as mobile v-blogging can well enhance the usage mobiles in future. Mobile web 2.0 application for social networking for library community should be realised that enables discussions, blogs, wikis and other features beneficial for all library growth.

Privacy and copyright should be matter of concern in future due to the availability of web contents 24*7 and possibilities of its damage and loss in the computer and also mobile searches by all the individuals without any authentication or identification, as it is going to be the fastest growing application in the next five years even today It is already a major feature of Apple iphones user.

The librarian has to understand fully the capabilities and potentials of the mobile technology and its use in libraries in near future by providing the quality based services matching with the needs of the user.

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About Author

Ms. Nidhi Khare, DLIS, S P University , Anand Gujarat.