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MOBILE APPLICATIONS IN LIBRARIES FOR DELIVERING INFORMATION RESOURCES AND SERVICES

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Abstract

The libraries have always adopted new technologies to assist in their objective of providing clients with effective and efficient services, as well as timely access to needed information. Implementation of Information and Communication Technologies has changed the way people access and communicate information. Users want easy and instant access to relevant information, putting pressure on Library and Information Science professionals to think out of the box for meeting their information needs. Application of mobile phones to provide library and information services are a significant step in this direction. The development of mobile technology has resulted in shifting the academic environment from traditional to mobile learning settings. This paper describes mobile technology based applications to render library and Information services.

Keywords: Mobile Applications, Smart Phone Applications, information, online Libraries

Introduction

Due to rise of cutting-edge technologies like mobile, transformed the way libraries offer many services. The mobile applications for information seeker have grown up tremendously with the growth of mobile technology. From children to adults all are finding information with the mobile applications. The mobile applications usage has significantly changed the way that people interact with the information and the way they view a library. Simply the mobile applications have now come up with "Libraries in Hand" trend. So, libraries no longer seem to command the same influence that they once did. At the same time, many libraries are getting I Pads and other tablets, and users are coming to the library with their smart phones and mobile devices. Learning using mobile technologies such as mobile phones/smart phones, I Phones, PDAs, iPod is boon especially for the students who are busy with their academic and research work. But mobile applications for information seeker too have grown up tremendously with the growth of technology. Even large amount of information resources and library services are delivered to users via mobile applications in libraries.



BENEFITS OF MOBILE APPLICATIONS IN LIBRARY

The major benefits of mobile applications at libraries are:

1. **Greater Reach:** As there are millions of smart phone users the libraries can reach the greater number of audience.
2. **Easy Marketing:** Due to large numbers of users, marketing the services becomes easier as it is very easy to access the services, users will prefer to adopt this type of services.
3. **User Friendly Aid:** Mobile Applications are easy to access and use. They are user friendly in operation. The users no need to login every time when they connect with the internet or switch to the applications. Once at the beginning the user download and login the app they no need to login again they get logged in automatically whenever they want to use the applications like Gmail and other apps. By this the users no need to remember the user name and password every time. This saves the time of the users.
4. **Saves the time:** When users browse a website they need to type the website name every time but where as in mobile app if they click on the app it connects direct to the browser. The dissemination of information is faster than the desktop, laptops and other means of electronic communication as it provide information in no time.
5. **Compatibility:** Websites are available to browse the OPAC but the mobile applications provide same information in handy and it is cost effective too. Mobiles are cheaper than the desktop and laptops. Even in mobile, webpage can be browsed but the font and screen size is small it is not comfortable. On the other side mobile application are developed by keeping in view of mobile and tablet screen size. So the visibility of the applications is adjusted to the mobile size and it will be very comfortable to use.
6. **Work Offline:** Some mobile applications are designed to work even offline. Internet connectivity are available 24/7, but the offline working apps are designed to work when the signal strength of internet is poor specially this problem occurs in the rural areas. The offline apps works even when there is no internet connection. On the other side websites need strong signal strength of internet to connect. This kind of offline mobile applications will surely deliver the purpose when users need to work offline. It helps to browse content or performs functions without a network connection.
7. **Reaches large number of audience:** The most of the world population are 3G/4G internet users. So if the libraries create the Mobile Applications it can reach the large number of audience.
8. **24/7 Access:** Access to library information for 24/7and 365 days. Nowadays much information is on cloud the users can access the information at any time and any number of times.
9. **Limitless access:** The users can access the information at any number of times as and when they require. This will be more useful for the ready reference of information and it



- avoids unnecessary storage of information in the devices.
10. **Encourage reading habit:** When the users get e-books and e-journals easily, in a way it encourages the reading habit of the users. The users can save time in searching the information and the same time can be utilized to refer more information or documents. By this the users can gain more knowledge by reading different kind of information available. Some voice reading applications help users to read the text, where the users can listen the text and they don't feel uneasy while reading in small screen.
 11. **Cost effective:** Many of the Mobile applications are free of cost. The library mobile apps should be provided free of cost because the library is a non- profit organization rather than a profit making. It is cost effective as everyone knows that the mobiles are cheaper than the desktop / laptops. So it is going to save the money for users. From the point of view of library, libraries no need to divert their funds to create the applications but there are many free mobile application developer like Apps bar, Apps geysers etc.
 12. **Personalized setting:** Users can set and view the applications in their own way and in a comfortable manner which they prefer. It helps user's requirement and preferences. The users can create a personalized bookshelf of favorite electronic books and journals of their own subject area.
 13. **Interactive:** Mobile apps are interactive whenever the internet is connected the notifications are been visible in the Smart Phone, the application reminds the users about the up gradation or some other information about the application.
 14. **Uses Less memory:** The information or documents downloaded to the desktop or laptop will accumulate lots of memory space in it, where as the Mobile applications use less memory and it work offline the information can be accessed anytime and any number of times.
 15. **Uniform Look and Feel:** The overall design and feel of the applications is maintained across various platforms if there is a single code running on all. This helps in easy synchronization.

LIMITATIONS OF MOBILE APPLICATION IN LIBRARY

The major limitations of mobile application in library are:

1. **Different Tools and Languages:** The custom design for the mobile application can be hard to fight off the differences in tools and languages of each platform's. There are certain Mobile Applications Development Labs can help out with this.
2. **Platform Integration:** The integrating the application with the local settings, preferences and notification apps, it can be faced with serious trouble trying to juggle multiple platforms. Even storage options are diversified so to look at the cloud options and integration of third party cloud services with the application. That's why is really important that the development team must be experienced.
3. **Loss of Flexibility:** Each platform provides its own flexibilities that is why they are there on the market. When a cross-platform app is designed the designers forced to look at the commonalities. This leads to loss of flexibility that each platform provides. So, while applications are getting diverse and user bases are expanding, there is no one clear about platform of choice. The benefit or lose from cross-platform mobile apps are depends upon the goals and features of the application.
4. **Limitations of storage and small display:** Since it depends upon the mobile devices which may have limited amount of storage and size of the display is small compared to computer, there are some limitations of using applications like small display screen and



overflow of data storage. To overcome from this problem the users can enhance storage capacity of the mobile by using memory card or they can go for the smart phone which gives more storage capacity and about the display nowadays the Televisions are provided with Bluetooth options by which mobile operations can be done by looking at the TV in big screen.

5. **Privacy and Security:** When downloading applications, users possibly have to allow the publishers to track and analyze their actions. This would give birth to the loss or abuse of personal information. On the other hand, one may get virus downloaded in mobile devices without being aware of it. The firewall application or antivirus can be downloaded and used to overcome with this type of problems.

MOBILE APPLICATIONS DEVELOPERS

The following are some of the companies which create Mobile Apps for library.

1. **Android Developers:** Resources for creating Android applications. Includes developer's guide, tutorials, and videos.
2. **Apps bar:** It is a free mobile app builder.
3. **Apps geyser:** Create an android app for free.
4. **Boopsie:** Specializing in public and academic libraries and universities, Boopsie can deliver mobile applications that are compatible with all Web-enabled phones. Contact the site for a price quote.
5. **Library Anywhere:** Created and sold through Library Thing, Library Anywhere is a mobile catalog for any library. Includes mobile Web and apps for I Phone, Blackberry and Android.
6. **Mobile Tuts +:** Tutorials for all mobile developers, regardless of platform. Topics include Techniques for building mobile apps and mobile Websites.

PROMOTING THE LIBRARY MOBILE APPLICATION

It is not enough to create a library mobile application even there is a need to promote it. For promoting the library mobile app librarians can print a pamphlet or broacher in which they can mention the main benefits available in the application and can reinforce how to use the various features of the applications. The application can be promoted by

1. Sending the pamphlets or broacher to users via E-mail or SMS.
2. Display the pamphlet or broacher in the library.
3. Sharing the pamphlet or broacher in social networking sites like face book, tweeter and others to get the feedback about library applications from the same source.

SKILLS REQUIRED

The library professionals should acquire and apply the following skills if they wish to provide mobile-based services:

1. Knowledge of hardware and software of mobile devices
2. Create/tailor mobile-optimized content including interactive and participative library homepages, OPAC, virtual tours, and databases
3. Familiarity with internet/intranet services like using e-mail, SMS and spam preventing, etc.
4. Develop expertise in protecting privacy and security levels as more personalized information is involved in using mobiles for library services
5. Skills relating to training and user orientation to market these services to users.



6. Skills related to searching and navigating through mobile devices, mobile web applications like push e-mail, etc.
7. Skills for interacting with users via smart phone applications, mobile-friendly WebPages, and third party intermediary clients

Conclusion

Due to the advancement of ICT, new technologies and tools are emerging day by day to fulfill the demand of the users. Mobile phones are inevitable tools of ICT. Application of mobile phones to provide library and information services will open new pathway towards this trend. Offering information products and services online is a motto of today's libraries and information centers. And the mobile applications are the best way to disseminate the library information products and services online. This facility will enable users to access library resources and services from anywhere anytime even when they are on move. For this purpose the use of technology is very essential. Mobile technology has become a boon to the libraries. A library may reach the remote users effectively by adopting mobile technology in its services.

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